U.S. DEPARTMENT OF COMMERCE
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PB-289 820

A Compendium of Lake and Reservoir Data Collected by the National Eutrophication Survey in Eastern North-Central, and Southeastern United States

(U.S.) National Euthrophication Survey, Corvallis, OR

Prepared for

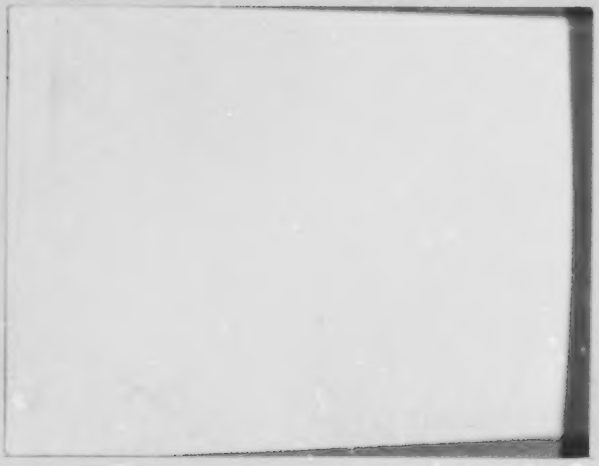
Corvallis Environmental Research Lab., OR

Sep 78

PB 289820

U.S. ENVIRONMENTAL PROTECTION AGENCY
NATIONAL EUTROPHICATION SURVEY

WORKING PAPER SERIES



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U.S. DEPARTMENT OF COMMERCE
SPRINGFIELD, VA. 22161

☆G.P.O. 699-440

TECHNICAL REPORT DATA
(Please read Instructions on the reverse before completing)

1. REPORT NO.	2.	3. RECIPIENT'S ACCESSION NO. PB289820
4. TITLE AND SUBTITLE A Compendium of Lake and Reservoir Data Collected by the National Eutrophication Survey in Eastern North-Central, and Southeastern United States		5. REPORT DATE Prepared Sept. 1978 6. PERFORMING ORGANIZATION CODE
7. AUTHOR(S)		8. PERFORMING ORGANIZATION REPORT NO. Working Paper # 475
9. PERFORMING ORGANIZATION NAME AND ADDRESS National Eutrophication Survey U.S. Environmental Protection Agency 200 S.W. 35th St. Corvallis, OR 97330		10. PROGRAM ELEMENT NO. 11. CONTRACT/GRANT NO.
12. SPONSORING AGENCY NAME AND ADDRESS Office of Research and Development U.S. Environmental Protection Agency 401 M Street, S.W. Washington, DC 20460		13. TYPE OF REPORT AND PERIOD COVERED Final - 1973 14. SPONSORING AGENCY CODE

15. SUPPLEMENTARY NOTES

16. ABSTRACT

Morphometric, limnological, and nutrient loading data are summarized for 153 lakes and reservoirs studied during 1973 - 1974 by the U.S. Environmental Protection Agency's National Eutrophication Survey. The water bodies for which data are summarized are located in the states of Alabama, Delaware, Florida, Georgia, Illinois, Indiana, Kentucky, Maryland, Mississippi, New Jersey, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, West Virginia.

17. KEY WORDS AND DOCUMENT ANALYSIS

a. DESCRIPTORS	b. IDENTIFIERS/OPEN ENDED TERMS	c. COSATI Field/Group
eutrophication lakes nutrients phosphorus nitrogen loading		48G

18. DISTRIBUTION STATEMENT	19. SECURITY CLASS *(This Report)*	21. NO. OF PAGES 270
	20. SECURITY CLASS *(This page)*	22. PRICE PCA12 MFA01

EPA Form 2220-1 (Rev. 4-77) PREVIOUS EDITION IS OBSOLETE

A COMPENDIUM OF LAKE AND RESERVOIR DATA COLLECTED BY THE NATIONAL EUTROPHICATION SURVEY IN EASTERN NORTH-CENTRAL, AND SOUTHEASTERN UNITED STATES.

WORKING PAPER NO. 475

September, 1978

INTRODUCTION

The National Eutrophication Survey (NES) was initiated in 1972 by the U.S. Environmental Protection Agency (EPA) to investigate the nationwide threat of accelerated eutrophication to freshwater lakes and reservoirs. In conjunction with State environmental agencies, the Survey developed information on nutrient sources, inputs, and impacts on selected freshwater lakes and reservoirs throughout the contiguous United States. In total, over 800 lakes and reservoirs, 4,200 tributaries and lake outlets, and 1,000 sewage treatment plants were included in the sampling programs which involved a joint field effort by EPA personnel, the National Guard of each State, operators of municipal and industrial waste treatment plants, and personnel of the respective State agency responsible for water pollution control activities. For details of the procedures and methods used in the geographical area encompassed in this report, refer to NES Working Paper No. 175, "National Eutrophication Survey Methods, 1973-1976".

One of the primary outputs of the NES program is the individual lake or reservoir report in which are summarized the trophic condition; the nutrient sources, loads, and controllability; and the limiting nutrient. Each report also includes all of the NES data pertaining to the water body, the drainage area, and the nutrient point sources. To make the NES data accessible to many users, data in each lake report have been summarized and compiled in this report which includes information on the water bodies sampled during the second year of the Survey

(1973). Geographically, this compendium includes data on lakes and reservoirs in Alabama, Delaware, Florida, Georgia, Illinois, Indiana, Kentucky, Maryland, Mississippi, New Jersey, North Carolina, Ohio, Pennsylvania, South Carolina, Tennessee, Virginia, and West Virginia.

Compendia of data on water bodies in other areas of the U.S. have been prepared. Working Paper No. 474 includes data on water bodies sampled in 1972 (northeast and part of north-central U.S.); Working Paper No. 476 provides data on water bodies sampled in 1974 (central and plains States); and Working Paper No. 477 includes the data obtained in 1975 (Rocky Mountain and far-western States).

COMPENDIUM COMPONENTS

In the compendium heading for each water body, the identifiers are given (NAME, STATE, principal COUNTY, STORET NO., WORKING PAPER NO., and NTIS ACCESSION NO.). Following the NAME, the trophic condition of the water body is shown in parentheses.

The trophic condition is based on an assessment of the data collected during the sampling year supplemented by results of past studies, if any, and communications with State personnel. Each water body was categorized as "OLIGOTROPHIC" (low nutrient levels and productivity), "MESOTROPHIC" (moderate nutrient levels and productivity), "EUTROPHIC (high nutrient levels and productivity), or "HYPEREUTROPHIC" (very high nutrient levels and productivity). For large water bodies, two or more trophic categories maybe indicated; e.g., the major tributary embayments (nearest the nutrient sources) may be eutrophic while the main portion of the water body is mesotrophic.

Following the heading, the data are arranged in five categories:

I. MORPHOMETRY
II. PHYSICAL AND CHEMICAL CHARACTERISTICS
III. BIOLOGICAL CHARACTERISTICS
IV. NUTRIENT LOADING CHARACTERISTICS
V. NON-POINT SOURCE NUTRIENT EXPORT

Each of these categories contains related information as discussed below. If data were not obtained, a series of asterisks is shown.

I. MORPHOMETRY

The morphometric data were compiled from the literature and/or from information provided by State and Federal personnel.

LAKE TYPE - either of NATURAL origin or resulting from stream IMPOUNDMENT.

DRAINAGE AREA (SQ KM) - the total drainage area (measured to the outlet) in square kilometers.

SURFACE AREA (SQ KM) - the area of the water surface in square kilometers.

MEAN DEPTH (METERS) - the volume of the water body, in cubic meters, divided by the surface area in square meters.

TOTAL INFLOW (CMS) - the mean of the inflows of all tributaries and the immediate drainage in cubic meters per second.

RETENTION TIME (YEARS or DAYS) - a mean value determined by dividing the lake volume, in cubic meters, by the mean annual outflow in cubic meters per unit of time. Note that the outflow maybe less than the total inflow because of evaporation; withdrawals for irrigation, public water supply, or other uses are included in the outflow.

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

These data are based on the sampling of each water body in the spring, summer, and fall of 1973. Depending on size, from one to many

sites were sampled, and multiple depths usually were sampled at each site. For every parameter in this category, except Secchi disc depth, the median value is reported. The median represents the middle value of all sampling stations, times, and depths. The mean of the SECCHI DISC depths at all stations and all sampling times is given.

MEDIAN ALKALINITY (MG/L) - total alkalinity, as $CaCO_3$, in milligrams per liter.

MEDIAN CONDUCTIVITY (UMHOS) - specific conductance at 25°C in micromhos per centimeter.

MEAN SECCHI DISC (METERS) - the mean limit of visibility of a standard Secchi disc in meters.

MEDIAN TOTAL PHOSPHORUS (MG/L) - as P in milligrams per liter.

MEDIAN DISSOLVED PHOSPHORUS (MG/L) - as P in milligrams per liter.

MEDIAN INORGANIC NITROGEN (MG/L) - nitrate + nitrite + ammonia, as N, in milligrams per liter.

MEDIAN TOTAL NITROGEN (MG/L) - Kjeldahl nitrogen + nitrate + nitrite, as N.

III. BIOLOGICAL CHARACTERISTICS

MEAN CHLOROPHYLL A (UG/L) - the mean concentration of all samples, in micrograms per liter.

ALGAL ASSAY CONTROL YIELD (MG/L-DRY WT) - for most of the water bodies is based on one value, in milligrams per liter dry weight, obtained from an assay sample collected during the first (spring) sampling. If more than one sample was taken, the values shown represent the range of yields, and the number following in parentheses indicates the number of samples assayed. The test organism was Selenastrum capricornutum Printz.

LIMITING NUTRIENT (no units) - may be determined by two procedures which are (1) the growth response of Selenastrum capricornutum to the addition of various amounts of phosphorus or nitrogen or (2) the ratio of inorganic nitrogen to dissolved phosphorus determined from the sampling data. When the inorganic nitrogen

to dissolved phosphorus ratio is 14/1 or greater, the water body is considered phosphorus limited, whereas ratios of less than 14/1 are considered indicative of nitrogen limitation.

The LIMITING NUTRIENT at each sampling time is given. For the last two sampling dates, the limiting nutrient is based on N/P ratios. The limiting nutrient for the first sampling date generally is based on algal assay results. However, if no value is shown for the ALGAL ASSAY CONTROL YIELD, the limiting nutrient for the first sample data is determined by the N/P ratio. Where "ND" is shown, nutrient data were not obtained, and the limiting nutrient cannot be determined.

SUMMARY OF PHYTOPLANKTON DATA - the COUNT of individuals, filaments, or colonies per milliliter of sample for each of the five most numerous genera on the date shown. The sum of the units of other genera present in the sample, but not specified, is also included.

IV. NUTRIENT LOADING CHARACTERISTICS

Nutrient loads of significant tributaries and the water body outlet(s) were calculated using the results of analyses of from 12 to 14 samples collected from each stream by the State National Guard monthly for a one-year period and stream flow estimates as provided by the U.S. Geological Survey through an interagency agreement. The nutrient loads of the unsampled portion of the drainage areas were estimated from the measured nutrient loads in the sampled streams in the area. Nutrient loads of all streams and the unsampled drainage area were estimated on the basis of a year of average or "normal" stream flow to minimize the influence of extreme hydrological events that may have occurred during the sampling year.

Sewage treatment plant nutrient loads were determined from results of analyses of from 5 to 14 monthly effluent samples and corresponding flow data provided by plant operators or by State agency personnel. For sewage treatment plants which were not sampled and those from which fewer than five samples were received, nutrient discharges were estimated on the basis of the population served by the facility.

For details of sampling procedures and methods of calculation, refer to NES Working Paper No. 175.

A. INPUT - an estimate of all external inputs of nitrogen and phosphorus to the water body.

POINT SOURCE MUNICIPAL (KG/YR) - an estimate of annual nitrogen and phosphorus inputs from municipal sewage treatment plants in kilograms per year.

POINT SOURCE INDUSTRIAL (KG/YR) - an estimate of annual nitrogen and phosphorus inputs from industrial waste treatment plants in kilograms per year.

POINT SOURCE SEPTIC TANKS (KG/YR) - an estimate of annual nitrogen and phosphorus inputs from septic tanks within approximately 90 meters of the shoreline in kilograms per year. If a value is shown for nitrogen but not phosphorus, the estimated phosphorus input was less than 5 kg.

NON-POINT SOURCE (KG/YR) - an estimate of the annual nitrogen and phosphorus inputs from tributaries, immediate drainage, and precipitation in kilograms per year.

TOTAL LOADING (KG/YR) - the sum of all external nitrogen and phosphorus inputs.

LAKE SURFACE AREA LOADING RATE (G/SQ M/YR) - the total loading for the sampling year divided by the lake surface area ($\frac{kg/yr}{km^2} \times 10^{-3}$) in grams per square meter of surface area per year.

B. OUTPUT - an estimate of the annual nitrogen and phosphorus discharged through the lake OUTLET(S) (KG/YR) in kilograms per year. Asterisks indicate little or no outlet flow (and output) during the sampling year.

PERCENT RETENTION - the percentage of incoming nitrogen or phosphorus retained in the lake annually:

$$\left(\frac{\text{Input load-output load}}{\text{input load}} \times 100\%\right).$$

V. NON-POINT SOURCE NUTRIENT EXPORT

STREAM NAME -

MEAN FLOW (CMS) - the mean stream flow in a year of average hydrology in cubic meters per second.

DRAINAGE AREA (SQ KM) - the drainage area of the stream in square kilometers.

MEAN TOTAL P (MG/L) - the mean concentration of total phosphorus in the stream at the sampling site during the year of sampling.

MEAN TOTAL N (MG/L) - the mean concentration of total nitrogen in the stream at the sampling site during the year of sampling.

TOTAL P EXPORT (KG/SQ KM/YR) - the total phosphorus load of the stream (after subtracting known point-source loads) divided by the drainage area, in kilograms per square kilometer per year. Asterisks indicate the phosphorus was less than 0.1 kg if a value is shown for nitrogen.

TOTAL N EXPORT (KG/SQ KM/YR) - the total nitrogen load of the stream (after subtracting known point-source loads) divided by the drainage area, in kilograms per square kilometer per year.

AVAILABILITY OF WORKING PAPERS

Compendium users desiring more detailed information may obtain a copy of the report on the water body of interest. Requests to the National Eutrophication Survey should include the NAME of the water body and the WORKING PAPER NO. as shown in the compendium heading.

Requests may be addressed to:

National Eutrophication Survey, EPA
Corvallis Environmental Research Laboratory
200 S.W. 35th Street
Corvallis, OR 97330

Only limited numbers of the Working Papers can be provided by NES. When these are exhausted, Working Papers can be obtained from:

National Technical Information Service
Department of Commerce
Springfield, VA 22161

The NTIS accession number is shown in the compendium heading. A blank or a series of zeros indicates numbers that were not available at the time of this printing; these accession numbers can be obtained from NES at the address shown on page 7.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ALABAMA

NAME - BANKHEAD LAKE (EUTROPHIC)
COUNTY - JEFFERSON, TUSCALOOSA, WALKER
STORET NO. - 0101 WORKING PAPER NO. 226, NTIS ACCESSION NO. PB-257 971/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	10334.10	37.23	3.1	179.800	7.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
25.	150.	1.2	0.029	0.007	0.770	1.180

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(6/ 8/73) P	(8/29/73) P	(10/30/73) P
4.0	1.3			

SUMMARY OF PHYTOPLANKTON DATA

6/ 8/73 GENERA	COUNT	8/29/73 GENERA	COUNT	10/30/73 GENERA	COUNT
ACTINASTRUM	780	FLAGELLATES	610	FLAGELLATES	699
FLAGELLATES	360	SYNEDRA	173	SCENEDESMUS	97
CYCLOTELLA	134	OSCILLATORIA	153	MELOSIRA	78
MELOSIRA	134	RAPHIDIOPSIS	102	CRYPTOMONAS	58
ANKISTRODESMUS	113	MELOSIRA	101	SYNEDRA	29
OTHER	290	OTHER	327	OTHER	254
TOTAL	1811	TOTAL	1466	TOTAL	1215

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	458830.	**********	20.	192450.	651300.
NITROGEN	1078010.	**********	800.	5518865.	6597675.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	218870.	66.	17.49
NITROGEN	9588085.	LOSS	177.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BIG YELLOW CREEK	0.200	38.1	0.022	0.812	4.	138.
LITTLE YELLOW CREEK	0.210	40.2	0.028	0.646	5.	109.
VALLEY CREEK	12.600	647.5	0.074	3.520	9.*	435.*
LOCUST FORK	52.520	3061.4	0.150	3.249	9.*	435.*
LOST CREEK	5.160	888.4	0.033	1.027	5.	193.
MULBERRY FORK	101.090	5161.9	0.051	1.022	29.	675.

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ALABAMA

NAME - HOLT LOCK AND DAM (EUTROPHIC)
COUNTY - TUSCALOOSA
STORET NO. - 0105 WORKING PAPER NO. 226. NTIS ACCESSION NO. PB-257 971/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	10960.90	13.36	7.9	191.100	6.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
20.	162.	1.3	0.018	0.006	0.835	1.040

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(6/ 7/73) P	(8/29/73) P	(10/31/73) P
2.2	0.8			

SUMMARY OF PHYTOPLANKTON DATA

6/ 8/73 GENERA	COUNT	8/29/73 GENERA	COUNT	10/31/73 GENERA	COUNT
FLAGELLATES	664	FLAGELLATES	315	FLAGELLATES	89
CRYPTOMONAS	521	CRYPTOMONAS	281	KIRCHNERIELLA	22
ACTINASTRUM	234	CYCLOTELLA	192	SCENEDESMUS	22
DINOFLAGELLATES	143	SYNEDRA	169	MERISMOPEDIA	11
CYCLOTELLA	39	DACTYLOCOCCOPSIS	150	NITZSCHIA	11
OTHER	27	OTHER	435	OTHER	2
TOTAL	1628	TOTAL	1542	TOTAL	157

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	10.	226360.	226370.
NITROGEN	**********	**********	105.	9953865.	9953970.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	149105.	34.	16.94
NITROGEN	9491100.	5.	745.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BLACK WARRIOR RIVER	179.800	10334.1	0.040	1.649	21.	928.
ROCKY BRANCH	0.090	5.4	0.021	1.235	11.	665.
UNNAMED STREAM (C1)	0.080	4.7	0.020	1.314	11.	697.
PEQUES CREEK	0.470	29.0	0.012	0.897	6.	479.
DAVIS CREEK	3.630	224.3	0.024	1.175	13.	629.
BLUE CREEK	2.730	96.9	0.020	0.824	19.	819.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ALABAMA

NAME - GANTT LAKE (MESO-EUTROPHIC)
COUNTY - COVINGTON
STORET NO. - 0103 WORKING PAPER NO. 227. NTIS ACCESSION NO. PB-258 285/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	1675.70	11.20	1.4	24.200	7.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
22.	64.	0.9	0.029	0.008	0.300	0.570

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(6/19/73) P	(8/30/73) P	(11/ 3/73) P
2.1	0.1			

SUMMARY OF PHYTOPLANKTON DATA

6/19/73 GENERA	COUNT	8/30/73 GENERA	COUNT	11/ 3/73 GENERA	COUNT
FLAGELLATES	170	FLAGELLATES	56	FLAGELLATES	350
DINOFLAGELLATES	58	LYNGBYA	41	DACTYLOCOCCOPSIS	110
MELOSIRA	25	OSCILLATORIA	32	CENTRIC DIATOM	46
PENNATE DIATOMS	25	DACTYLOCOCCOPSIS	24	NITZSCHIA	46
OSCILLATORIA	17	NITZSCHIA	16	OSCILLATORIA	37
OTHER	104	OTHER	67	OTHER	92
TOTAL	399	TOTAL	236	TOTAL	681

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	20.	29955.	29975.
NITROGEN	**********	**********	745.	722105.	722850.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	32250.	LOSS	2.68
NITROGEN	765985.	LOSS	64.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CONECUH RIVER	21.520	1489.2	0.041	0.951	19.	452.
BIG CREEK	0.190	25.9	0.018	0.805	4.	178.
FEAGIN CREEK	0.490	45.3	0.026	0.699	9.	236.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ALABAMA

NAME - GUNTERSVILLE RESERVOIR (EUTROPHIC)
COUNTY - MARSHALL, JACKSON
STORET NO. - 0104 WORKING PAPER NO. 228. NTIS ACCESSION NO. PB-257 972/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	63325.50	274.99	4.6	1097.700	13.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
53.	150.	1.0	0.044	0.014	0.480	0.710

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(6/ 8/73)	(8/16/73)	(10/22/73)
8.6	2.3 - 5.1 (2)	P	P	P

SUMMARY OF PHYTOPLANKTON DATA

6/ 8/73 GENERA	COUNT	8/16/73 GENERA	COUNT	10/22/73 GENERA	COUNT
MELOSIRA	2074	SYNEDRA	2114	NITZSCHIA	11575
CRYPTOMONAS	358	LYNGBYA	900	ANABAENOPSIS	4548
FLAGELLATES	333	RAPHIDIOPSIS	855	CRYPTOMONAS	4410
SYNEDRA	281	FLAGELLATES	810	DACTYLOCOCCOPSIS	3858
ANABAENA	102	CRYPTOMONAS	630	SYNEDRA	3445
OTHER	591	OTHER	4318	OTHER	11437
TOTAL	3739	TOTAL	9627	TOTAL	39273

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	53115.	660.	75.	1794225.	1848075.
NITROGEN	152320.	2210.	2880.	35129790.	35287200.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1709205.	8.	6.72
NITROGEN	33965895.	4.	128.3

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BROWNS CREEK	1.420	54.4	0.072	1.433	35.*	1212.*
BIG SPRING CREEK	3.200	118.9	0.033	1.799	29.	1588.
SHORT CREEK	7.290	290.1	0.491	3.275	35.*	1212.*
SCANHAM CREEK	3.130	152.0	0.069	2.109	48.	1504.
SHOAL CREEK	1.600	79.5	0.042	2.129	29.	1487.
TOWN CREEK	7.690	567.2	0.247	5.260	112.	2462.
BLACKOAK CREEK	1.060	54.4	0.051	2.492	33.	1726.
SOUTH SAUTY CREEK	6.290	435.1	0.044	2.277	22.	1181.
BRYANT CREEK	2.440	126.9	0.044	2.145	29.	763.
FLAT ROCK CREEK	1.520	73.3	0.073	1.716	50.	1213.
DRY CREEK	0.510	24.6	0.027	1.865	20.	618.
LITTLE BRYANT CREEK	0.340	16.8	0.057	2.922	36.	1388.
LONG ISLAND CREEK	4.610	221.4	0.049	0.986	34.	711.

WIDOWS CREEK	2.450	112.7	0.056	1.420	40.	1030.
CHOW CREEK	8.860	712.3	0.058	0.957	24.	397.
COON CREEK	4.590	211.1	0.036	0.812	27.	612.
MUD CREEK	4.190	191.4	0.073	1.383	53.	1049.
ROSEBERRY CREEK	1.750	79.8	2.103	5.291	35.*	1212.*
TENNESSEE RIVER	957.060	56436.1	0.053	0.989	27.	500.
SEQUATCHIE RIVER	30.990	1566.9	0.047	1.189	30.	595.
BATTLE CREEK	8.700	440.3	0.031	0.766	19.	479.

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ALABAMA

NAME - LAY LAKE (EUTROPHIC)
COUNTY - CHILTON, COOSA, SHELBY
STORET NO. - 0106 WORKING PAPER NO. 230, NTIS ACCESSION NO. PB-258 290/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	23387.70	48.56	10.1	343.800	14.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
48.	141.	0.7	0.076	0.032	0.390	0.640

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
7.1	9.0	(6/ 6/73) N	(8/29/73) N	(10/31/73) N

SUMMARY OF PHYTOPLANKTON DATA

6/ 6/73 GENERA	COUNT	8/29/73 GENERA	COUNT	10/31/73 GENERA	COUNT
MELOSIRA	7015	MELOSIRA	5610	MELOSIRA	931
FLAGELLATES	2551	ANABAENA	1898	FLAGELLATES	910
CHYPTOMONAS	996	FLAGELLATES	1223	CRYPTOMONAS	546
SCENEDESMUS	319	CRYPTOMONAS	633	CYCLOTELLA	303
STEPHANODISCUS	119	CYCLOTELLA	509	STEPHANODISCUS	202
OTHER	999	OTHER	2863	OTHER	689
TOTAL	11999	TOTAL	12736	TOTAL	3581

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	29185.	**********	20.	831070.	860275.
NITROGEN	48805.	**********	800.	13881440.	13931045.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1051970.	LOSS	17.72
NITROGEN	12157280.	13.	286.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
COOSA RIVER	316.790	21730.1	0.084	1.364	37.	606.
WAXAHATCHEE CREEK	7.430	458.4	0.047	1.466	18.	463.
LITTLE BEESWAX CREEK	0.430	24.3	0.039	0.650	21.	400.
BEESWAX CREEK	0.830	44.0	0.040	0.892	19.	607.
YELLOWLEAF CREEK	8.010	484.3	0.050	0.709	27.	310.
KAHATCHEE CREEK	0.720	40.1	0.020	0.690	12.	423.
CEDAR CREEK	1.200	70.4	0.066	1.067	26.	557.
PECKERWOOD CREEK	0.890	68.6	0.026	0.908	11.	376.
PAINT CREEK	0.500	41.4	0.019	0.850	7.	329.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ALABAMA

NAME - MITCHELL LAKE (EUTROPHIC)
COUNTY - CHILTON, COOSA
STORET NO. - 0108 WORKING PAPER NO. 230, NTIS ACCESSION NO. PB-258 290/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	25325.00	23.63	1.3	434.500	1.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
52.	141.	0.9	0.053	0.022	0.290	0.560

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(6/ 6/73) N	(8/29/73) N	(10/31/73) P
6.2	8.9			

SUMMARY OF PHYTOPLANKTON DATA

6/ 6/73 GENERA	COUNT	8/29/73 GENERA	COUNT	10/31/73 GENERA	COUNT
MELOSIRA	2027	MELOSIRA	1801	FLAGELLATES	1215
FLAGELLATES	753	ANABAENA	661	MELOSIRA	909
DINOFLAGELLATES	203	FLAGELLATES	443	UNKNOWN FILAMENT	275
DACTYLOCOCCOPSIS	174	CYCLOTELLA	319	CYCLOTELLA	243
CRYPTOMONAS	58	SCENEDESMUS	296	CRYPTOMONAS	243
OTHER	259	OTHER	1301	OTHER	681
TOTAL	3474	TOTAL	4821	TOTAL	3565

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	6025.	**********	20.	1079840.	1085885.
NITROGEN	11385.	**********	800.	13010680.	13022865.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1126335.	LOSS	45.95
NITROGEN	12247875.	6.	551.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
COOSA RIVER	402.200	23387.7	0.081	1.141	45.	520.
CARGLE RIVER	0.540	26.7	0.032	1.021	21.	697.
WALNUT CREEK	2.520	113.4	1.745	2.911	12.*	420.*
YELLOWLEAF CREEK	3.530	204.3	0.035	1.073	16.	642.
WEOGUFKA CREEK	3.960	287.5	0.028	0.760	13.	338.
HATCHET CREEK	16.010	963.5	0.029	0.779	15.	415.

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ALABAMA

NAME - MARTIN LAKE (MESOTROPHIC)
COUNTY - COOSA, ELMORE, TALLAPOOSA
STORET NO. - 0107 WORKING PAPER NO. 231, NTIS ACCESSION NO. PB-257 980/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	7674.20	157.83	12.9	123.500	176.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
11.	50.	1.6	0.017	0.004	0.170	0.380

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME			
		(3/19/73) P	(6/16/73) P	(8/25/73) P	(11/ 1/73) P
6.4	0.1				

SUMMARY OF PHYTOPLANKTON DATA

3/19/73 GENERA	COUNT	6/16/73 GENERA	COUNT	8/25/73 GENERA	COUNT	11/ 1/73 GENERA	COUNT
FLAGELLATES	1667	ANABAENA	590	ANABAENA	1208	MELOSIRA	623
MELOSIRA	538	FLAGELLATES	197	DACTYLOCOCCOPSIS	1060	CRYPTOMONAS	566
ANKISTRODESMUS	398	PERIDINIUM	172	LYNGBYA	789	FLAGELLATES	397
CRYPTOMONAS	150	UNKNOWN FILAMENT	148	STAURASTRUM	468	DACTYLOCOCCOPSIS	198
DINOFLAGELLATES	97	CYCLOTELLA	74	PERIDINIUM	222	SYNEDRA	142
OTHER	86	OTHER	147	OTHER	1479	OTHER	877
TOTAL	2936	TOTAL	1328	TOTAL	5226	TOTAL	2803

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	61930.	**********	30.	151385.	213345.
NITROGEN	128075.	**********	1170.	2602825.	2732070.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	81110.	62.	1.35
NITROGEN	3572695.	LOSS	17.3

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
TALLAPOOSA RIVER	83.170	5273.2	0.057	0.643	24.	312.
EMUCKFAW CREEK	3.220	173.0	0.023	0.502	12.	291.
TIMBERGUT CREEK	0.710	40.1	0.021	0.450	12.	247.
HILLABEE CREEK	12.310	735.6	0.046	0.710	10.	340.
ELKAHATCHEE CREEK	0.970	86.5	0.060	0.993	2.	288.
BUCK CREEK	1.300	51.0	0.022	0.847	18.	685.
SANDY CREEK	7.340	404.0	0.034	0.986	7.	535.
OAKACHOY CREEK	0.320	43.2	0.045	0.691	11.	161.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ALABAMA

NAME - PICKWICK LAKE (EUTROPHIC)
COUNTY - COLBERT, LAUDERDALE, AL; TISHOMINGO, MS; HARDING, TN
STORET NO. - 0109 WORKING PAPER NO. 233, NTIS ACCESSION NO. PB-258 246/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	85003.70	174.56	6.5	1489.600	9.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
56.	157.	1.1	0.056	0.035	0.535	0.685

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(6/ 9/73)	(8/15/73)	(10/22/73)
2.4	6.4 - 10.8 (2)	P	N	P AND N

SUMMARY OF PHYTOPLANKTON DATA

6/ 9/73 GENERA	COUNT	8/15/73 GENERA	COUNT	10/22/73 GENERA	COUNT
MELOSIRA	840	FLAGELLATES	340	FLAGELLATES	1300
FLAGELLATES	450	MELOSIRA	300	MELOSIRA	1210
		CYCLOTELLA	220	MERISMOPEDIA	60
		MERISMOPEDIA	50	CYCLOTELLA	20
		TETRAEDRON	40	DINOFLAGELLATES	20
OTHER	0	OTHER	160	OTHER	20
TOTAL	1290	TOTAL	1110	TOTAL	2630

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	73575.	215570.	60.	2519700.	2808905.
NITROGEN	219915.	624035.	2345.	59982835.	60829130.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	2995305.	LOSS	16.09
NITROGEN	55474895.	9.	348.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
TENNESSEE RIVER	1397.840	79642.4	0.054	1.283	30.	721.
SPRING CREEK	5.160	251.7	0.069	1.829	4.	1042.
LITTLE BEAR CREEK	1.840	139.9	0.035	0.729	15.	320.
CRANE CREEK	1.810	133.9	0.039	0.531	18.	256.
BUZZARD ROOST CREEK	1.980	180.0	0.030	0.880	11.	324.
BEAR CREEK	36.250	2450.1	0.051	0.863	24.	413.
INDIAN CREEK	1.390	80.3	0.069	0.830	38.	461.
YELLOW CREEK	8.080	515.4	0.046	0.756	23.	383.
BUMPASS CREEK	1.100	45.1	0.011	0.532	9.	404.
SWEETWATER CREEK	0.300	12.7	0.074	2.107	54.	1538.
SECOND CREEK	2.720	170.2	0.014	0.674	7.	231.
SINKING CREEK	1.340	98.7	0.062	1.629	28.	744.
CYPRESS CREEK	9.570	551.7	0.044	0.868	24.	473.

SANDY CREEK ARM	0.280	17.3	0.029	0.711	15.	371.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ALABAMA

NAME - LAKE PURDY (EUTROPHIC)
COUNTY - JEFFERSON, SHELBY
STORET NO. - 0115 WORKING PAPER NO. 234. NTIS ACCESSION NO. PB-257 974/AH

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	106.40	4.30	5.1	2.330	109.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
96.	205.	1.6	0.049	0.014	0.170	0.730

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
12.7	2.6	(3/19/73) N	(8/30/73) P	(11/ 2/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/19/73 GENERA	COUNT	8/30/73 GENERA	COUNT	11/ 2/73 GENERA	COUNT
ANABAENA	542	MERISMOPEDIA	1512	MELOSIRA	1890
FLAGELLATES	362	OSCILLATORIA	605	COELOSPHAERIUM	724
MELOSIRA	90	MELOSIRA	397	ANABAENA	671
DINOBRYON	78	FLAGELLATES	378	FLAGELLATES	618
LYNGBYA	36	ANABAENA	377	CRYPTOMONAS	194
NITZSCHIA	36				
OTHER	152	OTHER	926	OTHER	990
TOTAL	1296	TOTAL	4195	TOTAL	5087

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	7940.	**********	5.	6545.	14490.
NITROGEN	23805.	**********	265.	57125.	81195.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	5825.	60.	3.37
NITROGEN	69375.	15.	18.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
LITTLE CAHABA RIVER	1.330	60.3	0.310	1.212	82.	440.
COX CREEK	0.180	8.3	0.052	1.177	34.	813.
UNNAMED CREEK (C1)	0.090	4.4	0.057	0.605	38.	386.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ALABAMA

NAME - WEISS RESERVOIR (EUTROPHIC)
COUNTY - CHEROKEE, AL; FLOYD, GA
STORET NO. - 0112 WORKING PAPER NO. 235, NTIS ACCESSION NO. PB-257 973/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	13649.40	122.22	2.8	243.400	16.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TO N(MG/L)
45.	113.	0.5	0.092	0.034	0.260	640

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME			
11.3	5.7 - 6.2 (2)	(3/19/73) N	(6/ 8/73) N	(8/25/73) N	(10/30/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/19/73 GENERA	COUNT	8/25/73 GENERA	COUNT	10/30/73 GENERA	COUNT
MELOSIRA	1029	MELOSIRA	3829	MELOSIRA	6072
SYNEDRA	250	FLAGELLATES	1650	CYCLOTELLA	1291
DINOBRYON	209	OSCILLATORIA	1585	FLAGELLATES	1291
CYCLOTELLA	181	CYCLOTELLA	858	DACTYLOCOCCOPSIS	1252
CRYPTOMONAS	125	LYNGBYA	792	SYNEDRA	607
OTHER	515	OTHER	3500	OTHER	1935
TOTAL	2309	TOTAL	12214	TOTAL	12448

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	254590.	**********	130.	900555.	1155275.
NITROGEN	337255.	**********	4955.	8425585.	8767795.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	706815.	39.	9.45
NITROGEN	5920780.	32.	71.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
COOSA RIVER	185.230	10650.1	0.182	1.169	79.	606.
MT. HOPE CREEK	0.370	22.6	0.027	0.844	12.	431.
KING CREEK	0.460	26.9	0.014	0.655	6.	346.
BIG CEDAR CREEK	8.000	510.2	0.100	1.201	19.*	617.*
MUD CREEK	0.390	23.8	0.030	1.137	16.	582.
SPRING CREEK (SOUTH)	1.270	110.1	0.046	1.154	13.	439.
YELLOW CREEK	2.010	80.3	0.035	1.047	30.	920.
LITTLE RIVER	12.780	502.5	0.019	0.875	16.	751.
SPRING CREEK (NORTH)	2.590	94.5	0.035	0.988	30.	639.
CHATTOOGA RIVER	18.340	976.4	0.301	1.334	19.*	617.*

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ALABAMA

NAME - WILSON LAKE (EUTROPHIC)
COUNTY - LAUDERDALE, COLBERT, LAWRENCE
STORET NO. - 0114 WORKING PAPER NO. 236, NTIS ACCESSION NO. PB-257 979/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	79642.40	62.78	12.5	1433.400	6.9

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
53.	170.	1.3	0.053	0.022	0.460	0.610

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
7.4	4.5	(6, 9/73) P	(8/16/73) P	(10/22/73) N

SUMMARY OF PHYTOPLANKTON DATA

6/ 9/73 GENERA	COUNT	8/16/73 GENERA	COUNT	10/22/73 GENERA	COUNT
MELOSIRA	2077	MELOSIRA	3686	MELOSIRA	545
FLAGELLATES	756	FLAGELLATES	1574	FLAGELLATES	467
CYCLOTELLA	189	NITZSCHIA	881	CRYPTOMONAS	253
CRYPTOMONAS	142	CYCLOTELLA	829	CYCLOTELLA	136
STEPHANODISCUS	71	MERISMOPEDIA	472	DINOFLAGELLATES	58
OTHER	119	OTHER	1164	OTHER	173
TOTAL	3354	TOTAL	8606	TOTAL	1632

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	2860.	**********	45.	2403530.	2406435.
NITROGEN	10730.	**********	1630.	60972410.	60984770.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	2415145.	LOSS	38.33
NITROGEN	52359380.	14.	971.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
TENNESSEE RIVER	1381.930	76638.1	0.055	1.417	30.	772.
SHOAL CREEK	22.270	1282.0	0.040	0.792	22.	431.
BLUEWATER CREEK	4.160	334.1	0.034	1.015	13.	399.
BIG NANCE CREEK	7.730	499.9	0.064	1.918	26.	627.
TOWN CREEK	10.450	652.7	0.094	1.974	49.	1021.
SHEGOG CREEK	0.090	6.5	0.046	1.713	13.	815.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN DELAWARE

NAME - KILLEN POND (EUTROPHIC)
COUNTY - KENT
STORET NO. - 1002 WORKING PAPER NO. 237. NTIS ACCESSION NO. PB-247 344/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	46.40	0.30	1.5	0.680	8.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
17.	100.	0.5	0.170	0.042	1.610	2.550

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/10/73) P	(7/20/73) P	(9/28/73) N
116.2	15.9			

SUMMARY OF PHYTOPLANKTON DATA

4/10/73 GENERA	COUNT	7/20/73 GENERA	COUNT	9/28/73 GENERA	COUNT
FLAGELLATES	2278	ANACYSTIS(MICROCYSTIS)	2229	NITZSCHIA	6395
PHACUS	470	PHORMIDIUM	1501	ANACYSTIS(MICROCYSTIS)	5831
CRYPTOMONAS	217	OSCILLATORIA	257	SCENEDESMUS	3386
MELOSIRA	181	BLUE-GREEN FILAMENT	193	PHORMIDIUM	2947
NAVICULA	145	MELOSIRA	86	CRYPTOMONAS	1066
OTHER	741	OTHER	86	OTHER	2632
TOTAL	4032	TOTAL	4352	TOTAL	22257

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	15.	2345.	5.	2155.	4520.
NITROGEN	90.	12320.	10.	53550.	65970.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	2410.	47.	15.07
NITROGEN	62450.	5.	219.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
MURDERKILL RIVER	0.530	36.3	0.261	3.322	50.	1266.
UNNAMED TRIBUTARY (B1)	0.040	2.8	0.126	2.743	57.	1363.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN DELAWARE

NAME - MOORES LAKE (EUTROPHIC)
COUNTY - KENT
STORET NO. - 1005 WORKING PAPER NO. 238. NTIS ACCESSION NO. PB-247 347/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	35.20	0.10	1.1	0.790	2.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
20.	141.	0.7	0.245	0.071	2.400	3.500

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
81.3	43.1	(4/10/73) P	(7/20/73) P	(9/28/73) P

SUMMARY OF PHYTOPLANKTON DATA

4/10/73 GENERA	COUNT	7/20/73 GENERA	COUNT	9/28/73 GENERA	COUNT
CYCLOTELLA	4545	MELOSIRA	48050	MELOSIRA	54865
MELOSIRA	1673	FLAGELLATES	6231	CENTRIC DIATOM	21946
SYNEDRA	545	CRYPTOMONAS	3755	SCENEDESMUS	7659
NAVICULA	400	SCENEDESMUS	2901	CYCLOTELLA	5258
ASTERIONELLA	218	ACTINASTRUM	2646	CRUCIGENIA	3315
OTHER	837	OTHER	3155	OTHER	11344
TOTAL	8218	TOTAL	66738	TOTAL	104387

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	2995.	**********	10.	4310.	7315.
NITROGEN	3855.	**********	385.	95340.	99580.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	5825.	20.	73.15
NITROGEN	99275.	0.	995.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
ISIAC BRANCH	0.750	33.7	0.305	4.137	119.	2718.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN DELAWARE

NAME - NOXONTOWN POND (EUTROPHIC)
COUNTY - NEW CASTLE
STORET NO. - 1007 WORKING PAPER NO. 239. NTIS ACCESSION NO. PB-247 345/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	24.40	0.64	1.1	0.420	20.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
32.	143.	0.5	0.160	0.016	0.530	2.200

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/10/73) P	(7/20/73) P	(9/29/73) P
37.6	11.6			

SUMMARY OF PHYTOPLANKTON DATA

4/10/73 GENERA	COUNT	7/20/73 GENERA	COUNT	9/29/73 GENERA	COUNT
MELOSIRA	15419	MELOSIRA	2529	MELOSIRA	3468
SYNEDRA	8037	FLAGELLATES	2265	SYNEDRA	2262
FLAGELLATES	2523	CRYPTOMONAS	1434	SCENEDESMUS	2161
ASTERIONELLA	2056	SCENEDESMUS	792	FLAGELLATES	1307
CRYPTOMONAS	1122	SPHAEROCYSTIS	755	BLUE-GREEN FILAMENT	603
OTHER	1496	OTHER	3434	OTHER	3872
TOTAL	30653	TOTAL	11209	TOTAL	13673

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	475.	**********	5.	1975.	2455.
NITROGEN	1600.	**********	20.	39395.	41015.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1355.	45.	3.84
NITROGEN	22735.	45.	64.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UNNAMED TRIBUTARY (A2)	0.190	11.2	0.131	3.235	77.	1679.
UNNAMED TRIBUTARY (B1)	0.060	3.5	0.169	2.358	100.	1234.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN DELAWARE

NAME - SILVER LAKE (EUTROPHIC)
COUNTY - NEW CASTLE
STORET NO. - 1004 WORKING PAPER NO. 240. NTIS ACCESSION NO. PB-247 346/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	19.50	0.15	1.5	0.330	8.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
26.	217.	0.9	0.227	0.096	4.750	5.350

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
26.7	30.2	(4/10/73) P	(7/20/73) P	(9/29/73) P

SUMMARY OF PHYTOPLANKTON DATA

7/20/73 GENERA	COUNT	9/29/73 GENERA	COUNT
FLAGELLATES	11031	SCENEDESMUS	1698
MICRACTINIUM	2464	FLAGELLATES	609
SCHROEDERIA	1702	COELASTRUM	279
NITZSCHIA	1408	COSMARIUM	101
GREEN CELLS	821	STAURASTRUM	101
OTHER	4168	OTHER	227
TOTAL	21594	TOTAL	3015

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	2155.	**********	5.	2710.	4870.
NITROGEN	4845.	**********	160.	70810.	75815.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	2520.	48.	32.47
NITROGEN	58835.	22.	505.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
DEEP CREEK	0.160	9.5	0.839	7.567	257.	3275.
UNNAMED STREAM (81)	0.090	5.4	0.047	7.610	27.	3773.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN DELAWARE

NAME - TRUSSUM POND (EUTROPHIC)
COUNTY - SUSSEX
STORET NO. - 1010 WORKING PAPER NO. 241. NTIS ACCESSION NO. PB-247 309/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	38.60	0.22	1.2	0.530	6.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
10.	70.	0.9	0.038	0.011	1.280	1.800

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME	
5.1	0.3	(4/10/73) P	(7/20/73) P

SUMMARY OF PHYTOPLANKTON DATA

4/10/73 GENERA	COUNT	7/30/73 GENERA	COUNT
FLAGELLATES	1031	FLAGELLATES	361
LYNGBYA	42	SPONDYLOSIUM	361
MELOSIRA	42	COSMARIUM	258
FRAGILARIA	36	DINOFLAGELLATES	206
SYNEDRA	24	CENTRIC DIATOM	77
OTHER	133	OTHER	312
TOTAL	1308	TOTAL	1575

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	1.	380.	381.
NITROGEN	**********	**********	20.	36640.	36660.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	250.	34.	1.73
NITROGEN	27560.	25.	166.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
JAMES BRANCH	0.490	37.3	0.032	2.079	9.	906.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN DELAWARE

NAME - WILLIAMS POND (EUTROPHIC)
COUNTY - SUSSEX
STORET NO. - 1004 WORKING PAPER NO. 242. NTIS ACCESSION NO. PB-247 184/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	59.80	0.34	1.2	1.530	3.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
18.	100.	1.3	0.042	0.010	2.010	2.750

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
30.1	0.5	(4/10/73) P	(7/20/73) N	(9/28/73) P

SUMMARY OF PHYTOPLANKTON DATA

4/10/73 GENERA	COUNT	7/20/73 GENERA	COUNT	9/28/73 GENERA	COUNT
FLAGELLATES	4727	FLAGELLATES	8060	FLAGELLATES	1484
MELOSIRA	1504	DACTYLOCOCCOPSIS	7233	OSCILLATORIA	812
ASTERIONELLA	1504	CHLAMYDOMONAS	6614	MELOSIRA	504
NAVICULA	129	SCENEDESMUS	5476	BLUE-GREEN FILAMENT	476
DICTYOSPHAERIUM	129	COELASTRUM	1550	ANACYSTIS(MICROCYSTIS)	476
OTHER	430	OTHER	4952	OTHER	2268
TOTAL	8423	TOTAL	33885	TOTAL	6020

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	5.	2215.	2220.
NITROGEN	**********	**********	5.	162205.	162210.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	2155.	3.	6.53
NITROGEN	129955.	20.	477.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CLEAR BROOK	1.170	39.6	0.048	2.851	44.	2698.
HERRING RUN	0.310	10.4	0.035	5.146	33.	5007.
WILLIAM H. NEWTON DITCH	0.010	5.3	0.083	1.382	4.	64.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - ALLIGATOR LAKE (HYPEREUTROPHIC)
COUNTY - COLUMBIA
STORET NO. - 1201 WORKING PAPER NO. 243. NTIS ACCESSION NO. PB-SY/ 0/0/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	39.90	1.37	1.5	0.480	50.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
54.	178.	0.7	0.620	0.386	0.260	2.590

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(3/ 7/73) N	(8/31/73) N	(11/ 5/73) N
87.7	14.5			

SUMMARY OF PHYTOPLANKTON DATA

3/ 7/73 GENERA	COUNT	8/31/73 GENERA	COUNT	11/ 5/73 GENERA	COUNT
FLAGELLATES	2298	CHROOCOCCUS	9623	MELOSIRA	16084
CRYPTOMONAS	1253	CYCLOTELLA	5667	OSCILLATORIA	11628
CRUCIGENIA	1021	OSCILLATORIA	3657	ANABAENA	1163
SCENEDESMUS	625	ANACYSTIS(MICROCYSTIS)	3291	APHANOCAPSA	967
COELASTRUM	487	ANABAENA	2742	FLAGELLATES	967
OTHER	1813	OTHER	16573	OTHER	4636
TOTAL	7497	TOTAL	41553	TOTAL	35445

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	15130.	**********	5.	6290.	21425.
NITROGEN	43385.	**********	160.	39690.	83235.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	11875.	45.	15.64
NITROGEN	43140.	48.	60.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UNNAMED CREEK A1	0.020	2.1	0.284	3.034	98.	1055.
UNNAMED CREEK B1	0.020	2.1	0.635	2.710	224.	955.
UNNAMED CREEK C1	0.120	4.7	3.979	13.617	161.*	1005.*

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - LAKE APOPKA (HYPEREUTROPHIC)
COUNTY - ORANGE, LAKE
STORET NO. - 1202 WORKING PAPER NO. 244. NTIS ACCESSION NO. PB-279 107/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	476.60	125.40	1.7	2.730	2.5

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
121.	358.	0.4	0.102	0.019	0.230	3.770

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
46.6	**********	(3/12/73) P (9/ 6/73) P AND N (11/ 7/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/12/73 GENERA	COUNT	9/ 6/73 GENERA	COUNT	11/ 7/73 GENERA	COUNT
ANACYSTIS(MICROCYSTIS)	36000	LYNGBYA	81433	LYNGBYA	53585
LYNGBYA	31091	MELOSIRA	3667	APHANOCAPSA	4465
FRAGILARIA	3918	ANACYSTIS(MICROCYSTIS)	3033	ANABAENA	2977
APHANOCAPSA	3091	COCCOID CELLS	2450	FRAGILARIA	2679
MERISMOPEDIA	1636	MERISMOPEDIA	2200	NITZSCHIA	1786
OTHER	6082	OTHER	12497	OTHER	21433
TOTAL	81818	TOTAL	105280	TOTAL	86925

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	9645.	51265.	80.	17820.	78810.
NITROGEN	24100.	130110.	2920.	260600.	417730.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	35925.	54.	0.63
NITROGEN	354670.	15.	3.3

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UNNAMED STREAM H-1	1.090	36.4	0.315	4.141	300.	3946.
UNNAMED STREAM C-1	0.270	1.3	1.208	6.018	569.	21262.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - CRESCENT (EUTROPHIC)
COUNTY - FLAGLER, PUTNAM
STORET NO. - 1206 WORKING PAPER NO. 246. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	1289.80	70.61	2.0	10.660	153.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
18.	360.	0.7	0.065	0.033	0.130	1.270

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
10.2	4.3	(3/10/73) N	(9/ 7/73) N	(11/ 8/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/10/73 GENERA	COUNT	9/ 7/73 GENERA	COUNT	11/ 8/73 GENERA	COUNT
FLAGELLATES	132	LYNGBYA	6710	OSCILLATORIA	3975
MELOSIRA	115	OSCILLATORIA	4730	FLAGELLATES	2934
LYNGBYA	33	MELOSIRA	880	MELOSIRA	1325
COSCINODISCUS	33	DACTYLOCOCCOPSIS	880	CYCLOTELLA	1186
PENNATE DIATOMS	33	ANACYSTIS(MICROCYSTIS)	880	LYNGBYA	1136
OTHER	99	OTHER	5500	OTHER	5836
TOTAL	445	TOTAL	19580	TOTAL	16392

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	1965.	**********	15.	65345.	67325.
NITROGEN	5895.	**********	585.	655330.	661810.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	33775.	50.	0.95
NITROGEN	549230.	17.	9.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
HAW CREEK	7.930	906.5	0.120	1.781	34.	502.
UNNAMED CREEK C-1	0.850	98.4	0.485	1.829	136.	512.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - DOCTORS LAKE (EUTROPHIC)
COUNTY - CLAY
STORET NO. - 1207 WORKING PAPER NO. 247. NTIS ACCESSION NO. PB-281 319/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	58.00	12.96	3.0	0.720	1.7

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
48.	815.	0.9	0.084	0.028	0.120	1.445

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
27.1	4.7	(3/ 7/73) P AND N (9/ 7/73) N (11/ 8/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/ 7/73 GENERA	COUNT	9/ 7/73 GENERA	COUNT	11/ 8/73 GENERA	COUNT
MELOSIRA	876	OSCILLATORIA	15708	OSCILLATORIA	11678
ANACYSTIS(MICROCYSTIS)	666	DACTYLOCOCCOPSIS	11396	DACTYLOCOCCOPSIS	11293
KIRCHNERIELLA	543	CENTRIC DIATOM	5544	FLAGELLATES	3337
MERISMOPEDIA	434	LYNGBYA	5236	SCENEDESMUS	2695
SCENEDESMUS	318	MERISMOPEDIA	1694	ANACYSTIS(MICROCYSTIS)	2566
OTHER	1295	OTHER	13860	OTHER	11291
TOTAL	4132	TOTAL	53438	TOTAL	42860

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	8845.	**********	40.	1030.	9915.
NITROGEN	26520.	**********	1460.	54105.	82085.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	2295.	77.	0.77
NITROGEN	70110.	15.	6.3

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SWIMMING CREEK	0.130	7.8	0.020	2.001	10.	1035.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - LAKE DORA (HYPEREUTROPHIC)
COUNTY - LAKE
STORET NO. - 1208 WORKING PAPER NO. 248. NTIS ACCESSION NO. PB-281 403/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	613.80	22.37	3.0	3.510	221.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
105.	320.	0.4	0.102	0.022	0.240	3.290

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
60.0	**********	(3/12/73) P	(9/ 6/73) N	(11/ 5/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/12/73 GENERA	COUNT	9/ 6/73 GENERA	COUNT	11/ 5/73 GENERA	COUNT
LYNGBYA	17816	LYNGBYA	42201	LYNGBYA	64102
ANACYSTIS(MICROCYSTIS)	3857	APHANOCAPSA	3389	ANACYSTIS(MICROCYSTIS)	13090
APHANOCAPSA	3061	ANACYSTIS(MICROCYSTIS)	3081	CHROOCOCCUS	6352
MERISMOPEDIA	2939	CHROOCOCCUS	2464	MERISMOPEDIA	5005
SCENEDESMUS	979	MELOSIRA	2310	ANABAENA	1732
OTHER	8939	OTHER	7700	OTHER	10391
TOTAL	37591	TOTAL	61145	TOTAL	100672

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	2270.	**********	55.	38690.	41015.
NITROGEN	6800.	**********	2155.	414935.	423890.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	12450.	70.	1.83
NITROGEN	312365.	26.	18.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UNNAMED CREEK B-1	0.030	1.1	1.392	8.969	18.*	405.*
APOPKA-BEAUCLAIR CANAL	2.730	476.6	0.374	3.690	75.	744.

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - EAST LAKE TOHOPEKALIGA (MESOTROPHIC)
COUNTY - OSCEOLA
STORET NO. - 1261 WORKING PAPER NO. 249, NTIS ACCESSION NO. PB-281 318/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	797.70	49.30	2.7	6.230	247.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOT L N(MG/L)
10.	120.	1.5	0.042	0.007	0.070	0.930

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
5.2	0.1 - 0.2 (2)	(3/13/73) P	(9/ 6/73) N	(11/ 7/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/13/73 GENERA	COUNT	9/ 6/73 GENERA	COUNT	11/ 7/73 GENERA	COUNT
FLAGELLATES	191	LYNGBYA	1671	MELOSIRA	1311
APHANIZOMENON	169	DACTYLOCOCCOPSIS	1373	FLAGELLATES	1079
OSCILLATORIA	122	FLAGELLATES	955	CYCLOTELLA	745
MELOSIRA	81	MERISMOPEDIA	537	LYNGBYA	694
ANKISTRODESMUS	75	CHROOCOCCUS	477	DACTYLOCOCCOPSIS	347
OTHER	216	OTHER	2640	OTHER	2383
TOTAL	854	TOTAL	7653	TOTAL	6559

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	4980.	**********	30.	30720.	35730.
NITROGEN	7940.	**********	1065.	354645.	363650.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	5025.	86.	0.72
NITROGEN	228820.	37.	7.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BOGGY CREEK	1.650	230.0	0.317	1.261	52.	259.
UNNAMED CREEK B-1	0.120	13.4	0.106	1.744	32.	514.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - LAKE EFFIE (HYPEREUTROPHIC)
COUNTY - POLK
STORET NO. - 1209 WORKING PAPER NO. 224. NTIS ACCESSION NO. PB-000 000/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	**********	0.41	1.0	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
134.	361.	0.3	1.480	0.950	0.410	4.900

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
261.4	20.5	(3/14/73) N (9/ 5/73) N (11/ 7/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/14/73 GENERA	COUNT	9/ 5/73 GENERA	COUNT	11/ 7/73 GENERA	COUNT
SELENASTRUM	41532	SCENEDESMUS	36977	CYCLOTELLA	18883
KIRCHNERIELLA	2343	CYCLOTELLA	36383	MERISMOPEDIA	17046
SCHROEDERIA	2162	FLAGELLATES	12320	SCENEDESMUS	12093
RAPHIDIOPSIS	1441	PEDIASTRUM	9049	FLAGELLATES	11733
LYNGBYA	1261	KIRCHNERIELLA	8855	OSCILLATORIA	8063
OTHER	2342	OTHER	47153	OTHER	22914
TOTAL	51081	TOTAL	150737	TOTAL	90732

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - LAKE ELOISE (EUTROPHIC)
COUNTY - POLK
STORET NO. - 1252 WORKING PAPER NO. 250. NTIS ACCESSION NO. PB-000 000/AH

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	14.60	4.69	3.0	0.050	8.9

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
82.	340.	0.9	0.486	0.339	0.170	2.480

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
70.2	10.6	(3/ 8/73) N	(9/ 6/73) N	(11/ 6/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/ 8/73 GENERA	COUNT	9/ 6/73 GENERA	COUNT	11/ 6/73 GENERA	COUNT
RAPHIDIOPSIS	22523	LYNGBYA	20612	DACTYLOCOCCOPSIS	5784
LYNGBYA	9910	CHROOCOCCUS	6634	OSCILLATORIA	4423
SCENEDESMUS	6396	DACTYLOCOCCOPSIS	6502	CHROOCOCCUS	4083
ANACYSTIS(MICROCYSTIS)	4775	RAPHIDIOPSIS	5647	TETRAEDRON	3062
DICTYOSPHAERIUM	2072	SCENEDESMUS	3764	CENTRIC DIATOM	2722
OTHER	9729	OTHER	34906	OTHER	28917
TOTAL	55405	TOTAL	78065	TOTAL	48991

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - LAKE GEORGE (EUTROPHIC)
COUNTY - PUTNAM,VOLUSIA
STORET NO. - 1210 WORKING PAPER NO. 251. NTIS ACCESSION NO. PB-000 000/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	9738.40	186.16	3.0	110.610	58.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
52.	1150.	0.8	0.129	0.063	0.165	1.600

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
35.0	1.9 - 4.8 (6)	(3/10/73) N	(9/ 1/73) N	(11/ 8/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/10/73 GENERA	COUNT	9/ 1/73 GENERA	COUNT	11/ 8/73 GENERA	COUNT
COSCINODISCUS	648	CYCLOTELLA	8408	OSCILLATORIA	9907
CYCLOTELLA	617	OSCILLATORIA	5205	FLAGELLATES	8006
MELOSIRA	555	ANABAENOPSIS	5005	RAPHIDIOPSIS	3235
NITZSCHIA	247	DACTYLOCOCCOPSIS	3604	CYCLOTELLA	1415
LYNGBYA	170	LYNGBYA	3403	MELOSIRA	1415
OTHER	1081	OTHER	13614	OTHER	12007
TOTAL	3318	TOTAL	39239	TOTAL	35985

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	14100.	**********	45.	610725.	624870.
NITROGEN	35200.	**********	1665.	12638920.	12675785.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	561005.	10.	3.36
NITROGEN	6865460.	46.	68.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
ST. JOHNS RIVER	102.200	8831.9	0.176	3.581	63.	1312.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - LAKE GIBSON (EUTROPHIC)
COUNTY - POLK
STORET NO. - 1211 WORKING PAPER NO. 252. NTIS ACCESSION NO. PB-000 000/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	11.20	1.92	2.0	0.080	1.7

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
18.	153.	0.8	0.167	0.069	0.115	1.250

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
19.7	6.5	(3/ 8/73) N	(9/ 4/73) N	(11/ 6/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/ 8/73 GENERA	COUNT	9/ 4/73 GENERA	COUNT	11/ 6/73 GENERA	COUNT
MELOSIRA	2645	LYNGBYA	5228	FLAGELLATES	11037
DINOBRYON	2210	ANACYSTIS(MICROCYSTIS)	2091	ANACYSTIS(MICROCYSTIS)	5390
SCENEDESMUS	2065	FLAGELLATES	1901	MELOSIRA	3978
ANACYSTIS(MICROCYSTIS)	1232	SCENEDESMUS	1331	CHROOCOCCUS	2823
FLAGELLATES	870	CENTRIC DIATOM	1046	LYNGBYA	2310
OTHER	2391	OTHER	7030	OTHER	9620
TOTAL	11413	TOTAL	18627	TOTAL	35158

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	575.	**********	**********	1090.	1665.
NITROGEN	1730.	**********	75.	6235.	8040.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	420.	75.	0.87
NITROGEN	3970.	51.	4.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UNNAMED CREEK B1	0.020	1.9	0.416	2.095	108.	550.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - GLENADA LAKE (EUTROPHIC)
COUNTY - HIGHLANDS
STORET NO. - 1212 WORKING PAPER NO. 253. NTIS ACCESSION NO. PB-000 000/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	**********	0.72	4.5	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
15.	112.	1.2	0.134	0.072	0.165	1.305

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
27.7	6.3	(3/13/73) N	(9/ 5/73) N	(11/ 7/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/13/73 GENERA	COUNT	9/ 5/73 GENERA	COUNT	11/ 7/73 GENERA	COUNT
FLAGELLATES	1144	ANACYSTIS(MICROCYSTIS)	4312	OSCILLATORIA	16940
SCENEDESMUS	1114	KIRCHNERIELLA	2002	DACTYLOCOCCOPSIS	12980
CHROOCOCCUS	783	FLAGELLATES	1386	CHROOCOCCUS	8800
NITZSCHIA	602	DACTYLOCOCCOPSIS	1232	ANKISTRODESMUS	4248
ANABAENA	512	CHROOCOCCUS	924	ANACYSTIS(MICROCYSTIS)	3960
OTHER	1959	OTHER	8008	OTHER	9900
TOTAL	6114	TOTAL	17864	TOTAL	56828

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - LAKE GRIFFIN (EUTROPHIC)
COUNTY - LAKE
STORET NO. - 1214 WORKING PAPER NO. 254. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	2007.20	35.60	2.9	9.630	124.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
100.	267.	0.5	0.119	0.038	0.260	3.450

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
66.9	**********	(3/14/73) P	(9/ 6/73) N	(11/ 5/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/14/73 GENERA	COUNT	9/ 6/73 GENERA	COUNT	11/ 5/73 GENERA	COUNT
LYNGBYA	65151	LYNGBYA	140350	LYNGBYA	174650
ANACYSTIS(MICROCYSTIS)	37360	OSCILLATORIA	108500	DACTYLOCOCCOPSIS	20961
DACTYLOCOCCOPSIS	8755	ACHNANTHES	13300	APHANOTHECE	20300
SYNEDRA	2850	BLUE-GREEN FILAMENT	8400	ANACYSTIS(MICROCYSTIS)	20300
OSCILLATORIA	2647	APHANOCAPSA	4550	BLUE-GREEN FILAMENT	18900
OTHER	7432	OTHER	25550	OTHER	88430
TOTAL	124195	TOTAL	300650	TOTAL	343541

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	3900.	20195.	35.	26185.	50315.
NITROGEN	18210.	54690.	1385.	834095.	908380.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	29225.	42.	1.41
NITROGEN	913825.	LOSS	25.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
DEAD RIVER	0.060	11.3	0.118	2.531	19.	411.
HAINES CREEK	8.360	1678.3	0.074	2.564	12.	413.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - LAKE HAINES (EUTHOPHIC)
COUNTY - POLK
STORET NO. - 1215 WORKING PAPER NO. 255 . NTIS ACCESSION NO. PB-000 000/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	21.20	2.90	2.5	0.080	2.9

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
14.	210.	0.9	0.063	0.014	0.115	1.090

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
26.6	4.1	(3/ 8/73) N	(9/ 6/73) N	(11/ 7/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/ 8/73 GENERA	COUNT	9/ 6/73 GENERA	COUNT	11/ 7/73 GENERA	COUNT
ANACYSTIS(MICROCYSTIS)	1566	MELOSIRA	3816	LYNGBYA	13689
ANABAENA	944	MERISMOPEDIA	2589	CENTRIC DIATOM	5513
SYNEDRA	693	LYNGBYA	1567	FLAGELLATES	2661
KIRCHNERIELLA	572	FLAGELLATES	1431	CHROOCOCCUS	2567
MELOSIRA	482	DACTYLOCOCCOPSIS	1295	DACTYLOCOCCOPSIS	2091
OTHER	2881	OTHER	8450	OTHER	7895
TOTAL	7138	TOTAL	19148	TOTAL	34416

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)*

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	1515.	**********	5.	460.	1980.
NITROGEN	2230.	**********	255.	42670.	45155.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	163.	92.	0.68
NITROGEN	4080.	91.	15.6

* NOTE: EXCEPT FOR MUNICIPAL POINT-SOURCE AND OUTLET LOADS.

NUTRIENT LOADS ARE ESTIMATES.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - HORSESHOE LAKE (EUTROPHIC)
COUNTY - SEMINOLE
STORET NO. - 1219 WORKING PAPER NO. 225. NTIS ACCESSION NO. PB-000 000/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	••••••••••	0.38	1.2	••••••••••	••••••

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
10.	100.	1.0	0.034	0.023	0.130	0.930

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
12.1	0.3	(3/15/73) P (9/ 5/73) N (11/ 5/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/15/73 GENERA	COUNT	9/ 5/73 GENERA	COUNT	11/ 5/73 GENERA	COUNT
ANABAENA	3870	BOTRYOCOCCUS	3439	BOTRYOCOCCUS	4940
FLAGELLATES	316	FLAGELLATES	975	LYNGBYA	1017
MELOSIRA	60	MELOSIRA	770	MELOSIRA	291
STAURASTRUM	15	ANACYSTIS(MICROCYSTIS)	155	FLAGELLATES	291
ACHNANTHES	15	KIRCHNERIELLA	154	CYCLOTELLA	291
OTHER	31	OTHER	821	OTHER	799
TOTAL	4307	TOTAL	6314	TOTAL	7629

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	••••••••••	••••••••••	••••••••••	••••••••••	••••••••••
NITROGEN	••••••••••	••••••••••	••••••••••	••••••••••	••••••••••

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	••••••••••	•••••	••••••••••
NITROGEN	••••••••••	•••••	••••••••••

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - LAKE HOWELL (EUTROPHIC)
COUNTY - SEMINOLE
STORET NO. - 1220 WORKING PAPER NO. 25/. NTIS ACCESSION NO. PB-000 000/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	71.70	1.60	2.5	1.530	30.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
67.	250.	0.9	1.260	1.175	0.285	1.745

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
54.1	12.7 - 15.0 (2)	(3/15/73) N	(9/ 5/73) N	(11/ 5/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/15/73 GENERA	COUNT	9/ 5/73 GENERA	COUNT	11/ 5/73 GENERA	COUNT
LYNGBYA	8043	DACTYLOCOCCOPSIS	8470	FLAGELLATES	21560
GOLENKINIA	7754	SYNEDRA	7957	CYCLOTELLA	4004
RAPHIDIOPSIS	7681	CYCLOTELLA	5133	SCENEDESMUS	2772
ANABAENA	2681	GOLENKINIA	3080	MERISMOPEDIA	1848
CRYPTOMONAS	1884	SCENEDESMUS	1440	DACTYLOCOCCOPSIS	1540
OTHER	6812	OTHER	10108	OTHER	8624
TOTAL	34855	TOTAL	36188	TOTAL	40348

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	35660.	**********	15.	57935.	93610.
NITROGEN	106945.	**********	510.	76145.	183600.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	66375.	29.	58.51
NITROGEN	97470.	47.	114.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
HOWELL CREEK	1.290	57.2	1.351	2.324	963.	1029.
UNNAMED CREEK B-1	0.020	0.8	0.322	1.916	213.	1256.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - LAKE ISTOKPOGA (MESO-EUTROPHIC)
COUNTY - HIGHLANDS
STORET NO. - 1221 WORKING PAPER NO. 258. NTIS ACCESSION NO. PB- /AS

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	1572.10	112.07	1.8	15.030	155.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
10.	120.	0.9	0.039	0.010	0.120	1.060

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
6.6	0.6 - 2.8 (2)	(3/12/73) P AND N (9/ 4/73) P AND N (11/ 6/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/12/73 GENERA	COUNT	9/ 4/73 GENERA	COUNT	11/ 6/73 GENERA	COUNT
CHROOCOCCUS	1596	LYNGBYA	4427	ANACYSTIS(MICROCYSTIS)	2618
FLAGELLATES	678	ANACYSTIS(MICROCYSTIS)	4427	MELOSIRA	2310
DINOBRYON	632	APHANOCAPSA	962	FLAGELLATES	693
SYNEDRA	196	MELOSIRA	770	SPERMATOZOOPSIS	539
LYNGBYA	166	PENNATE DIATOMS	670	MERISMOPEDIA	539
OTHER	753	OTHER	5039	OTHER	3234
TOTAL	4021	TOTAL	16295	TOTAL	9933

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	2520.	**********	45.	31050.	33615.
NITROGEN	4915.	**********	1630.	588835.	595380.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	25570.	24.	0.30
NITROGEN	567575.	5.	5.3

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
JOSEPHINE CREEK	3.520	370.4	**********	**********	18.*	359.*
ARBUCKLE CREEK	10.390	981.6	0.060	1.076	18.	359.

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - LAKE JESSIE (EUTROPHIC)
COUNTY - POLK
STORET NO. - 1258 WORKING PAPER NO. 259, NTIS ACCESSION NO. PB-000 000/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	12.60	0.77	2.0	0.110	162.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
42.	198.	1.2	0.051	0.011	0.090	0.890

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
26.3	**********	(3/ 8/73) N	(9/ 4/73) N	(11/ 6/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/ 8/73 GENERA	COUNT	9/ 4/73 GENERA	COUNT	11/ 6/73 GENERA	COUNT
RAPHIDIOPSIS	23636	OSCILLATORIA	2406	FLAGELLATES	9121
ANACYSTIS(MICROCYSTIS)	3273	FLAGELLATES	2406	PENNATE DIATOMS	5568
TETRAEDRON	2181	CRYPTOMONAS	2406	ANACYSTIS(MICROCYSTIS)	4383
SYNEDRA	2181	DACTYLOCOCCOPSIS	1636	CENTRIC DIATOM	3317
CRUCIGENIA	1818	CYCLOTELLA	1540	DACTYLOCOCCOPSIS	2843
OTHER	10366	OTHER	11647	OTHER	18472
TOTAL	43455	TOTAL	22041	TOTAL	43704

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	40.	**********	**********	2460.	2500.
NITROGEN	125.	**********	**********	7140.	7265.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	160.*	94.	3.25
NITROGEN	2990.*	59.	9.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UNNAMED CANAL A-1	0.070	7.4	0.626	1.716	206.	567.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - LAKE JESSUP (HYPEREUTROPHIC)
COUNTY - SEMINOLE
STORET NO. - 1223 WORKING PAPER NO. 260. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	388.50	32.00	1.1	4.970	82.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
76.	818.	0.3	0.492	0.288	0.290	2.755

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
76.6	21.4	(3/14/73) N	(9/ 5/73) N	(11/ 5/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/14/73 GENERA	COUNT	9/ 5/73 GENERA	COUNT	11/ 5/73 GENERA	COUNT
CHROOCOCCUS	48649	FRAGILARIA	69813	FLAGELLATES	7443
LYNGBYA	15255	LYNGBYA	35163	LYNGBYA	7187
CYCLOTELLA	12973	NITZSCHIA	17197	ANACYSTIS(MICROCYSTIS)	5614
FLAGELLATES	9640	ANACYSTIS(MICROCYSTIS)	13604	MERISMOPEDIA	2695
MERISMOPEDIA	6306	ANABAENOPSIS	3593	CHROOCOCCUS	2053
OTHER	7627	OTHER	13347	OTHER	14534
TOTAL	100450	TOTAL	152717	TOTAL	39526

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	40585.	**********	10.	94995.	135590.
NITROGEN	80935.	**********	395.	345760.	427090.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	71750.	47.	4.24
NITROGEN	438290.	LOSS	13.3

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
GEE CREEK	0.350	35.0	2.375	5.703	314.	1015.
SOLDIER CREEK	0.220	60.3	0.240	2.783	24.	310.
UNNAMED CREEK C-1	0.250	22.7	0.716	3.291	252.	1161.
HOWELL CREEK	2.670	137.3	0.804	1.795	316.	731.
SALT CREEK	0.200	14.8	0.577	2.191	253.	966.
SWEETWATER CREEK	0.200	6.7	1.296	8.858	1201.	8212.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - LAKE KISSIMMEE (EUTROPHIC)
COUNTY - OSCEOLA
STORET NO. - 1224 WORKING PAPER NO. 261, NTIS ACCESSION NO. PB-000 000/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	4149.20	141.40	1.8	33.400	88.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
19.	118.	0.9	0.034	0.007	0.145	1.515

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(3/14/73) P	(9/ 5/73) P	(11/ 7/73) N
24.1	**********			

SUMMARY OF PHYTOPLANKTON DATA

3/14/73 GENERA	COUNT	9/ 5/73 GENERA	COUNT	11/ 7/73 GENERA	COUNT
ANABAENOPSIS	4048	DACTYLOCOCCOPSIS	18634	LYNGBYA	7828
DACTYLOCOCCOPSIS	3303	LYNGBYA	6930	DACTYLOCOCCOPSIS	4363
RHIZOSOLENIA	2237	ANABAENOPSIS	6160	COELASTRUM	2823
COELASTRUM	1705	COELASTRUM	2926	PENNATE DIATOMS	2823
LYNGBYA	2451	CHROOCOCCUS	2772	ANACYSTIS(MICROCYSTIS)	2310
OTHER	4687	OTHER	10318	OTHER	10870
TOTAL	18431	TOTAL	47740	TOTAL	31017

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	5.	63760.	63765.
NITROGEN	**********	**********	180.	1855550.	1855730.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	36865.	42.	0.45
NITROGEN	1478835.	20.	13.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
KISSIMMEE RIVER	23.000	2988.9	0.066	1.930	16.	468.
TIGER CREEK (H1+C1)	3.500	396.3	0.030	1.325	8.	369.
JACKSON CANAL	2.300	264.2	0.040	1.325	11.	364.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - LAWNE LAKE (EUTROPHIC)
COUNTY - ORANGE
STORET NO. - 1249 WORKING PAPER NO. 262. NTIS ACCESSION NO. PB-000 000/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	10.70	0.63	1.1	0.220	36.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
32.	225.	0.2	2.560	0.117	1.350	4.770

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
84.9	18.9 - 26.7 (2)	(3/14/73) N	(9/ 5/73) P	(11/ 7/73) P

SUMMARY OF PHYTOPLANKTON DATA

3/14/73 GENERA	COUNT	9/ 5/73 GENERA	COUNT	11/ 7/73 GENERA	COUNT
KIRCHNERIELLA	20000			FLAGELLATES	713
SCENEDESMUS	17143			PHACUS	267
FLAGELLATES	12857			EUGLENA	89
RAPHIDIOPSIS	10714			SYNEDRA	89
ANACYSTIS(MICROCYSTIS)	7500				
OTHER	29643	OTHER	0	OTHER	0
TOTAL	97857	TOTAL	0	TOTAL	1158

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	410.	**********	5.	9045.	9460.
NITROGEN	1805.	**********	85.	33320.	35210.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	2830.	70.	15.02
NITROGEN	16220.	54.	55.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UNNAMED CANAL B1	0.120	5.8	1.572	4.691	1052.	3142.
UNNAMED CANAL C1	0.010	0.3	0.403	3.174	500.	3983.
UNNAMED CANAL D1	0.020	0.4	0.294	1.632	562.	3112.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - LAKE LULU (EUTROPHIC)
COUNTY - POLK
STORET NO. - 1227 WORKING PAPER NO. 263. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	20.10	1.22	1.5	0.090	235.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
74.	342.	0.4	1.490	1.030	1.065	5.710

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
276.6	25.2	(3/ 8/73) N	(9/ 6/73) N	(11/ 6/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/ 8/73 GENERA	COUNT	9/ 6/73 GENERA	COUNT	11/ 6/73 GENERA	COUNT
SCENEDESMUS	8163	ANACYSTIS(MICROCYSTIS)	15690	FLAGELLATES	3114
PHACUS	5151	SCENEDESMUS	2615	FRAGILARIA	1779
LYNGBYA	2530	CHROOCOCCUS	1889	SCENEDESMUS	1602
CYCLOTELLA	1988	DACTYLOCOCCOPSIS	1598	CYCLOTELLA	1602
MERISMOPEDIA	1747	RAPHIDIOPSIS	1453	CRYPTOMONAS	1602
OTHER	7258	OTHER	4068	OTHER	9787
TOTAL	26837	TOTAL	27313	TOTAL	19486

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - LAKE MARION (EUTROPHIC)
COUNTY - POLK
STORET NO. - 1228 WORKING PAPER NO. 264. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	92.50	12.82	1.3	0.820	235.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
34.	131.	0.8	0.044	0.016	0.260	2.220

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
30.0	3.3	(3/13/73) P (9/ 6/73) P AND N (11/ 7/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/13/73 GENERA	COUNT	9/ 6/73 GENERA	COUNT	11/ 7/73 GENERA	COUNT
LYNGBYA	44209	LYNGBYA	93556	LYNGBYA	111650
ANABAENOPSIS	30544	BLUE-GREEN FILAMENT	25795	BLUE-GREEN FILAMENT	39078
DACTYLOCOCCOPSIS	16679	ANABAENA	5198	ANABAENA	5518
APHANOTHECE	8239	ACHNANTHES	2695	ACHNANTHES	5198
NITZSCHIA	3617	APHANOTHECE	1731	COSMARIUM	4813
OTHER	8238	OTHER	9431	OTHER	9245
TOTAL	111526	TOTAL	138408	TOTAL	175502

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	20.	1840.	1860.
NITROGEN	**********	**********	790.	62750.	63540.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1065.	43.	0.15
NITROGEN	54375.	14.	5.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UNNAMED CREEK D-1	0.080	8.1	0.049	2.138	16.	694.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - LAKE MINNEHAHA (MESOTROPHIC)
COUNTY - ORANGE
STORET NO. - 1229 WORKING PAPER NO. 265. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	4.30	0.39	3.0	0.140	97.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
42.	180.	1.6	0.038	.0.012	0.080	0.590

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
8.7	**********	(3/14/73) N	(9/ 5/73) N	(11/ 5/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/14/73 GENERA	COUNT	9/ 5/73 GENERA	COUNT	11/ 5/73 GENERA	COUNT
RAPHIDIOPSIS	1899	OSCILLATORIA	15977	OSCILLATORIA	9529
GOLENKINIA	669	DACTYLOCOCCOPSIS	10107	DACTYLOCOCCOPSIS	7123
KIRCHNERIELLA	524	LYNGBYA	1251	FLAGELLATES	1925
TETRAEDRON	307	TETRAEDRON	1059	KIRCHNERIELLA	1251
FLAGELLATES	271	FLAGELLATES	866	CHROOCOCCUS	963
		SCENEDESMUS	673	ANACYSTIS(MICROCYSTIS)	963
OTHER	1285	OTHER	3851	OTHER	6352
TOTAL	4955	TOTAL	33784	TOTAL	28106

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	15.	230.	245.
NITROGEN	**********	**********	545.	3475.	4020.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	185.	24.	0.63
NITROGEN	3855.	4.	10.3

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UNNAMED CREEK B-1	0.060	2.1	0.059	0.911	55.	833.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - LAKE MINNEOLA (OLIGO-MESOTROPHIC)
COUNTY - LAKE
STORET NO. - 1230 WORKING PAPER NO. 266. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (Sq KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	409.20	7.64	2.7	1.890	128.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
10.	86.	2.4	0.018	0.009	0.070	0.530

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
3.3	••••••••••	(3/15/73) P AND N (9/ 6/73) N (11/ 7/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/15/73 GENERA	COUNT	9/ 6/73 GENERA	COUNT	11/ 7/73 GENERA	COUNT
FLAGELLATES	174	LYNGBYA	3235	LYNGBYA	2757
LYNGBYA	35	CHROOCOCCUS	1438	CHROOCOCCUS	1470
MELOSIRA	35	FLAGELLATES	659	APHANOCAPSA	962
CRYPTOMONAS	35	COSMARIUM	60	SYNEDRA	254
APHANOCAPSA	35	CRYPTOMONAS	60	CHLAMYDOMONAS	192
OTHER	0	OTHER	300	OTHER	747
TOTAL	314	TOTAL	5752	TOTAL	6382

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	••••••••••	••••••••••	25.	2025.	2050.
NITROGEN	••••••••••	••••••••••	905.	51440.	52345.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1540.	25.	0.27
NITROGEN	125420.	LOSS	6.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UNNAMED CREEK B-1	1.860	398.9	0.038	1.019	4.	117.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - LAKE MONROE (EUTROPHIC)
COUNTY - SEMINOLE, VOLUSIA
STORET NO. - 1231 WORKING PAPER NO. 267, NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	6682.20	35.50	1.8	74.320	10.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
41.	1000.	0.6	0.188	0.128	0.300	1.910

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
14.2	4.7 - 7.3 (2)	(3/14/73) N	(9/ 5/73) N	(11/ 5/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/14/73 GENERA	COUNT	9/ 5/73 GENERA	COUNT	11/ 5/73 GENERA	COUNT
LYNGBYA	1642	MELOSIRA	4107	CHLAMYDOMONAS	1759
MELOSIRA	1318	LYNGBYA	3850	ANACYSTIS(MICROCYSTIS)	554
ANACYSTIS(MICROCYSTIS)	1219	CYCLOTELLA	2138	LYNGBYA	434
NITZSCHIA	672	FRAGILARIA	2053	CENTRIC DIATOM	313
SCENEDESMUS	299	FLAGELLATES	1283	DACTYLOCOCCOPSIS	265
OTHER	1119	OTHER	5648	OTHER	817
TOTAL	6269	TOTAL	19079	TOTAL	4142

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	30980.	**********	10.	494085.	525075.
NITROGEN	83535.	**********	360.	5639895.	5723790.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	543740.	LOSS	14.79
NITROGEN	5760010.	LOSS	161.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
ST. JOHNS RIVER	71.120	6397.3	0.211	2.432	75.	865.
BETHEL CREEK	0.200	15.5	0.058	1.811	24.	757.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - LAKE MUNSON (HYPEREUTROPHIC)
COUNTY - LEON
STORET NO. - 1247 WORKING PAPER NO. 268. NTIS ACCESSION NO. PB-000 000/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	167.10	1.03	1.5	1.750	11.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
46.	265.	0.3	1.475	0.852	0.925	4.010

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
140.3	42.1 - 42.7 (2)	(6/20/73) N	(8/30/73) N	(11/ 5/73) N

SUMMARY OF PHYTOPLANKTON DATA

6/20/73 GENERA	COUNT	8/30/73 GENERA	COUNT	11/ 5/73 GENERA	COUNT
FLAGELLATES	4021	ANABAENA	4033	ANABAENA	40425
CRYPTOMONAS	3251	ANACYSTIS(MICROCYSTIS)	1589	FLAGELLATES	21432
CYCLOTELLA	2823	SCENEDESMUS	1589	CHRYSOCOCCUS	12448
ANACYSTIS(MICROCYSTIS)	1540	RAPHIDIOPSIS	1344	CHLAMYDOMONAS	11422
KIRCHNERIELLA	1112	MERISMOPEDIA	1059	CYCLOTELLA	6288
OTHER	5818	OTHER	2361	OTHER	12702
TOTAL	18565	TOTAL	11975	TOTAL	104717

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	48015.	**********	**********	30485.	78500.
NITROGEN	131515.	**********	**********	82140.	213655.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	104735.	LOSS	76.21
NITROGEN	296815.	LOSS	207.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UNNAMED CREEK 81	1.750	158.0	1.413	3.837	193.	516.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - LAKE OKEECHOBEE (EUTROPHIC)
COUNTY - GLADES,HENDRY,MARTIN,OKEECHOBEE,PALM BEACH,ST. LUCIE
STORET NO. - 1232 WORKING PAPER NO. 269. NTIS ACCESSION NO. PB-000 000/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	13007.00	1890.71	2.8	53.210	3.4

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
132.	640.	0.7	0.063	0.010	0.185	1.745

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
14.5	0.1 - 0.7 (3)	(3/ 7/73) P (9/ 1/73) P AND N (11/ 6/73) P AND N

SUMMARY OF PHYTOPLANKTON DATA

3/ 7/73 GENERA	COUNT	9/ 1/73 GENERA	COUNT	11/ 6/73 GENERA	COUNT
LYNGBYA	828	LYNGBYA	23486	LYNGBYA	6545
MERISMOPEDIA	453	FRAGILARIA	2888	ANACYSTIS(MICROCYSTIS)	3208
CRYPTOMONAS	374	COSCINODISCUS	2310	FLAGELLATES	2695
FLAGELLATES	335	OSCILLATORIA	1155	MERISMOPEDIA	2310
OSCILLATORIA	217	ANACYSTIS(MICROCYSTIS)	1155	PENNATE DIATOMS	1796
OTHER	1104	OTHER	933	OTHER	6158
TOTAL	3311	TOTAL	31927	TOTAL	22712

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	12325.	**********	**********	338190.	350515.
NITROGEN	34380.	**********	**********	7454915.	7489295.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	191960.	45.	0.19
NITROGEN	6953360.	7.	4.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
KISSIMMEE RIVER	39.680	**********	0.084	2.190	**********	**********
HARNEY POND CANAL	5.960	**********	0.140	1.765	**********	**********
TAYLOR CREEK (C-1)	2.870	**********	0.447	2.206	**********	**********
INDIAN PRAIRIE CANAL	1.520	**********	0.150	2.156	**********	**********
MIAMI CANAL	1.150	**********	0.056	2.716	**********	**********
LEMBIN CREEK	1.010	**********	0.176	2.186	**********	**********
UNNAMED CREEK B1	0.730	**********	0.879	2.694	**********	**********
UNNAMED CANAL L1	0.290	**********	0.115	2.798	**********	**********

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - LAKE POINSETT (EUTROPHIC)
COUNTY - BREVARD, ORANGE, OSCEOLA
STORET NO. - 1234 WORKING PAPER NO. 271, NTIS ACCESSION NO. PB-279 135/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	3447.30	17.60	1.5	33.050	9.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
36.	490.	0.8	0.085	0.051	0.150	1.675

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
6.5	5.8 - 6.2 (2)	(3/15/73) N	(9/ 5/73) N	(11/ 5/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/15/73 GENERA	COUNT	9/ 5/73 GENERA	COUNT	11/ 5/73 GENERA	COUNT
FLAGELLATES	1692	FLAGELLATES	951	FLAGELLATES	397
CYCLOTELLA	821	CYCLOTELLA	885	DINOFLAGELLATES	82
CRYPTOMONAS	370	SPERMATOZOOPSIS	522	PENNATE DIATOMS	11
SPERMATOZOOPSIS	186	ANACYSTIS(MICROCYSTIS)	133	MOUGEOTIA	11
NITZSCHIA	145	SCENEDESMUS	44		
OTHER	194	OTHER	110	OTHER	0
TOTAL	3408	TOTAL	2645	TOTAL	501

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - REEDY LAKE (EUTROPHIC)
COUNTY - POLK
STORET NO. - 1236 WORKING PAPER NO. 272. NTIS ACCESSION NO. PB-000 000/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	157.70	14.11	3.3	1.000	1.5

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
50.	219.	0.8	0.033	0.008	0.330	1.965

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
34.8	1.3	(3/12/73) P	(9/ 5/73) P	(11/ 7/73) P

SUMMARY OF PHYTOPLANKTON DATA

9/ 5/73 GENERA	COUNT	11/ 7/73 GENERA	COUNT
BLUE-GREEN FILAMENT	378070	BLUE-GREEN FILAMENT	653868
ANABAENA	22330	ANABAENA	14734
LYNGBYA	19827	LYNGBYA	14215
NAVICULA	9047	APHANOTHECE	2774
OTHER	5772	OTHER	13266
TOTAL	435046	TOTAL	698857

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	360.	40.	20.	8820.	9240.
NITROGEN	880.	1400.	620.	1063400.	1066300.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1010.	89.	0.65
NITROGEN	45680.	96.	75.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UNNAMED CREEK H1	0.200	3.0	0.029	3.821	57.	7333.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - LAKE SEMINOLE (EUTROPHIC)
COUNTY - PINELLAS
STORET NO. - 1248 WORKING PAPER NO. 273. NTIS ACCESSION NO. PB-000 000/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	36.30	1.85	2.7	0.450	128.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
114.	480.	0.7	0.234	0.026	0.175	2.555

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
102.0	9.2	(3/ 9/73) N	(9/ 4/73) N	(11/ 6/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/ 9/73 GENERA	COUNT	9/ 4/73 GENERA	COUNT	11/ 6/73 GENERA	COUNT
LYNGBYA	30000	DACTYLOCOCCOPSIS	29260	PENNATE DIATOMS	28394
RAPHIDIOPSIS	9818	OSCILLATORIA	26565	CENTRIC DIATOM	24784
KIRCHNERIELLA	8727	LYNGBYA	20020	FLAGELLATES	24300
ANACYSTIS(MICROCYSTIS)	6000	RAPHIDIOPSIS	9240	OSCILLATORIA	23822
CYCLOTELLA	5273	NITZSCHIA	8855	SCENEDESMUS	9145
OTHER	15091	OTHER	42735	OTHER	43314
TOTAL	74909	TOTAL	136675	TOTAL	153759

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	3310.	3310.
NITROGEN	**********	**********	**********	21810.	21810.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	2830.	15.	1.79
NITROGEN	41635.	LOSS	11.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UNNAMED STREAM #1	0.010	1.1	0.264	2.806	105.	1132.
LONG BAYOU CREEK	0.240	18.6	0.150	1.611	48.	650.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - SOUTH LAKE (EUTROPHIC)
COUNTY - BREVARD
STORET NO. - 123A WORKING PAPER NO. 270. NTIS ACCESSION NO. PB-000 000/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	**********	4.46	0.9	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
80.	1085.	0.9	0.074	0.028	0.130	1.660

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(3/15/73) N	(9/ 5/73) N	(11/ 5/73) N
23.2	10.3			

SUMMARY OF PHYTOPLANKTON DATA

3/15/73 GENERA	COUNT	9/ 5/73 GENERA	COUNT	11/ 5/73 GENERA	COUNT
ANABAENA	6154	PERIDINIUM	715	FLAGELLATES	2941
LYNGBYA	3756	FLAGELLATES	520	ANACYSTIS(MICROCYSTIS)	2508
FLAGELLATES	1041	COELOSPHAERIUM	357	CHROOCOCCUS	1557
DINOBRYON	950	PENNATE DIATOMS	260	ANABAENA	691
PERIDINIUM	588	EUGLENA	162	COSMARIUM	509
KIRCHNERIELLA	588			MERISMOPEDIA	509
OTHER	2262	OTHER	617	OTHER	1724
TOTAL	15339	TOTAL	2631	TOTAL	10439

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - LAKE TALQUIN (EUTROPHIC)
COUNTY - GADSDEN, LEON
STORET NO. - 1239 WORKING PAPER NO. 274. NTIS ACCESSION NO. PB-000 000/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	4335.50	43.70	2.8	47.400	30.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
11.	57.	1.0	0.085	0.031	0.290	0.770

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
9.5	3.6	(6/20/73) N (8/31/73) P AND N (11/ 5/73) P AND N

SUMMARY OF PHYTOPLANKTON DATA

6/20/73 GENERA	COUNT	8/31/73 GENERA	COUNT	11/ 5/73 GENERA	COUNT
CYCLOTELLA	585	MELOSIRA	6545	MELOSIRA	5619
FLAGELLATES	502	FLAGELLATES	1771	FLAGELLATES	1463
SCENEDESMUS	84	CYCLOTELLA	1771	CYCLOTELLA	308
DINOFLAGELLATES	84	DACTYLOCOCCOPSIS	1078	CHROOCOCCUS	154
ASTERIONELLA	84	NAVICULA	1001	SCENEDESMUS	154
OTHER	293	OTHER	2772	OTHER	618
TOTAL	1632	TOTAL	14938	TOTAL	8316

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	53105.	**********	135.	209200.	262440.
NITROGEN	158710.	**********	5010.	2041295.	2205015.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	139420.	47.	6.01
NITROGEN	1735985.	21.	50.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
OCKAWAHA CREEK	1.430	86.0	0.014	1.221	7.	644.
LITTLE RIVER	12.030	844.3	0.190	2.152	78.	951.
BEAR CREEK	0.510	30.8	0.089	1.097	47.	576.
OCHLOCKONEE RIVER	29.480	3030.3	0.183	1.179	41.	319.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - LAKE TARPON (MESOTROPHIC)
COUNTY - PINELLAS
STORET NO. - 1250 WORKING PAPER NO. 275. NTIS ACCESSION NO. PB-000 000/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	155.40	10.25	2.5	1.570	189.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
10.	1583.	2.5	0.041	0.027	0.070	0.720

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
6.9	**********	(3/ 9/73) N	(9/ 4/73) N	(11/ 6/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/ 9/73 GENERA	COUNT	9/ 4/73 GENERA	COUNT	11/ 6/73 GENERA	COUNT
CRYPTOMONAS	104	FLAGELLATES	2017	FLAGELLATES	7315
DINOBRYON	59	SPERMATOZOOPSIS	1008	CHLAMYDOMONAS	481
FLAGELLATES	37	CLOSTERIUM	800	DINOFLAGELLATES	289
CYCLOTELLA	24	DACTYLOCOCCOPSIS	146	CLOSTERIUM	289
KIRCHNERIELLA	11	OSCILLATORIA	123	SPERMATOZOOPSIS	241
OTHER	33	OTHER	92	OTHER	288
TOTAL	268	TOTAL	4186	TOTAL	8903

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	705.	**********	5.	3935.	4645.
NITROGEN	2110.	**********	245.	108465.	110820.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1830.	61.	0.45
NITROGEN	38520.	65.	10.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SOUTH CREEK	0.080	8.8	0.078	2.298	24.	706.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - LAKE TOHOPEKALIGA (EUTROPHIC)
COUNTY - OSCEOLA
STORET NO. - 1241 WORKING PAPER NO. 277, NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	1605.80	76.20	2.4	12.290	172.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
23.	173.	0.7	0.246	0.152	0.200	1.730

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
30.6	3.7 - 6.1 (4)	(3/13/73) N	(9/ 6/73) N	(11/ 7/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/13/73 GENERA	COUNT	9/ 6/73 GENERA	COUNT	11/ 7/73 GENERA	COUNT
SCENEDESMUS	4190	SCENEDESMUS	7700	FLAGELLATES	4747
ANABAENA	1178	DACTYLOCOCCOPSIS	4466	SCENEDESMUS	2181
MELOSIRA	829	FLAGELLATES	3234	ANACYSTIS(MICROCYSTIS)	1796
ANACYSTIS(MICROCYSTIS)	698	NITZSCHIA	2002	MELOSIRA	1411
DACTYLOCOCCOPSIS	611	MELOSIRA	1540	CHROOCOCCUS	898
OTHER	4803	OTHER	6314	OTHER	6027
TOTAL	12309	TOTAL	25256	TOTAL	17060

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	193640.	**********	30.	178595.	372265.
NITROGEN	831460.	**********	1065.	799060.	1631585.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	63410.	83.	4.89
NITROGEN	1269745.	22.	21.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SHINGLE CREEK	2.670	466.2	1.030	2.391	243.*	755.*
PARTIN CANAL	0.310	26.4	0.626	2.599	243.	755.
ST. CLOUD CANAL	6.470	826.2	0.580	1.504	5.	271.

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - TROUT LAKE (HYPEREUTROPHIC)
COUNTY - LAKE
STORET NO. - 1242 WORKING PAPER NO. 278. NTIS ACCESSION NO. PB-000 000/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	62.60	0.41	1.5	0.530	13.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
33.	189.	0.7	1.110	0.970	0.650	2.860

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
77.0	26.5 - 30.5 (2)	(3/12/73) N	(9/ 6/73) N	(11/ 5/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/12/73 GENERA	COUNT	9/ 6/73 GENERA	COUNT	11/ 5/73 GENERA	COUNT
MELOSIRA	2391	MELOSIRA	29668	CENTRIC DIATOM	4287
OOCYSTIS	1413	FLAGELLATES	6568	FLAGELLATES	3810
DICTYOSPHAERIUM	1304	CENTRIC DIATOM	3963	MELOSIRA	2699
ANACYSTIS(MICROCYSTIS)	1159	CHROOCOCCUS	3624	ANACYSTIS(MICROCYSTIS)	2064
CYCLOTELLA	1087	GLOEOTHECE	3397	CHROOCOCCUS	1667
OTHER	3226	OTHER	23267	OTHER	11001
TOTAL	10580	TOTAL	70487	TOTAL	25528

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	6895.	**********	**********	11015.	17910.
NITROGEN	23260.	**********	45.	36485.	59790.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	17910.	0.	43.68
NITROGEN	59790.	0.	145.8

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - LAKE WEOHYAKAPKA (MESO-EUTROPHIC)
COUNTY - POLK
STORET NO. - 1243 WORKING PAPER NO. 279. NTIS ACCESSION NO. PB-000 000/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	242.20	30.50	1.6	2.150	263.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
10.	72.	1.0	0.047	0.011	0.080	0.760

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
7.8	••••••••••	(3/13/73) P (9/ 5/73) P AND N (11/ 7/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/13/73 GENERA	COUNT	9/ 5/73 GENERA	COUNT	11/ 7/73 GENERA	COUNT
ANACYSTIS(MICROCYSTIS)	506	FLAGELLATES	3593	MELOSIRA	2076
MELOSIRA	434	MELOSIRA	1027	FLAGELLATES	1161
DINOBRYON	239	CYCLOTELLA	821	SPERMATOZOOPSIS	273
SYNEDRA	181	SPERMATOZOOPSIS	411	PENNATE DIATOMS	170
FLAGELLATES	145	OSCILLATORIA	308	LYNGBYA	170
OTHER	259	OTHER	1489	OTHER	886
TOTAL	1764	TOTAL	7649	TOTAL	4736

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	340.	••••••••••	45.	3175.	3560.
NITROGEN	1020.	••••••••••	1760.	114200.	116980.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	2260.	37.	0.12
NITROGEN	100050.	14.	3.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
TIGER CREEK	1.390	136.8	0.027	1.400	9.	456.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN FLORIDA

NAME - LAKE YALE (EUTROPHIC)
COUNTY - LAKE
STORET NO. - 1246 WORKING PAPER NO. 280. NTIS ACCESSION NO. PB-000 000/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	**********	15.95	3.7	**********	1.5

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
108.	295.	1.5	0.027	0.014	0.160	1.270

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
25.4	**********	(3/14/73) P	(9/ 6/73) N	(11/ 5/73) N

SUMMARY OF PHYTOPLANKTON DATA

9/ 6/73 GENERA	COUNT	11/ 5/73 GENERA	COUNT
LYNGBYA	19967	LYNGBYA	55809
SYNEDRA	17498	SYNEDRA	10587
RAPHIDIOPSIS	2515	BLUE-GREEN FILAMENT	3573
COSMARIUM	1729	APHANOCAPSA	2056
RHIZOSOLENIA	1101	APHANOTHECE	1371
OTHER	5498	OTHER	2840
TOTAL	48308	TOTAL	76236

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTHOPHICATION SURVEY LAKES IN GEORGIA

NAME - ALLATOONA RES. (EUTROPHIC)
COUNTY - BARTOW, CHEROKEE, COBB
STORET NO. - 1301 WORKING PAPER NO. 281. NTIS ACCESSION NO. PB-246 636/AS

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	2845.00	48.00	9.4	50.600	103.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
17.	46.	1.4	0.020	0.005	0.150	0.430

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
7.5	0.1 - 0.2 (2)	(6/30/73) P	(9/17/73) P	(11/12/73) P

SUMMARY OF PHYTOPLANKTON DATA

6/30/73 GENERA	COUNT	9/17/73 GENERA	COUNT	11/12/73 GENERA	COUNT
ANABAENA	953	RAPHIDIOPSIS	7411	MELOSIRA	1433
MELOSIRA	318	LYNGBYA	5188	FLAGELLATES	302
PERIDINIUM	136	ACHNANTHES	889	SYNEDRA	264
SCENEDESMUS	136	MERISMOPEDIA	519	CRYPTOMONAS	189
MERISMOPEDIA	136	CRYPTOMONAS	445	CENTRIC DIATOM	189
OTHER	411	OTHER	3408	OTHER	489
TOTAL	2090	TOTAL	17860	TOTAL	2866

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	26595.	**********	60.	72755.	99410.
NITROGEN	53115.	**********	2200.	982730.	1038045.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	35180.	65.	2.07
NITROGEN	1078825.	LOSS	21.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
ETOWAH RIVER	34.600	1675.7	0.051	0.587	28.	355.
SHOAL CREEK	2.600	173.5	0.036	0.515	15.	240.
LITTLE RIVER	5.000	354.8	0.088	1.020	39.	449.
NOONDAY CREEK	1.800	126.9	0.244	1.105	24.	267.
ALLATOONA CREEK	1.000	72.5	0.035	0.572	15.	242.
STAMP CREEK	0.700	46.6	0.024	0.401	11.	180.
LAKE ACWORTH OUTLET	0.700	49.2	0.049	0.537	7.	187.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN GEORGIA

NAME - LAKE BLACKSHEAR (EUTROPHIC)
COUNTY - CRISP, DOOLY, LEE, SUMTER, WORTH
STORET NO. - 1302 WORKING PAPER NO. 283, NTIS ACCESSION NO. PB-246 857/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	9712.50	34.46	5.3	136.200	16.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
19.	58.	0.8	0.035	0.014	0.250	0.690

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
1.9	0.3	(6/22/73) P	(9/ 7/73) P	(11/ 8/73) N

SUMMARY OF PHYTOPLANKTON DATA

6/22/73 GENERA	COUNT	9/ 7/73 GENERA	COUNT	11/ 8/73 GENERA	COUNT
CHRYSOPHYTAN CELLS	17	SCHROEDERIA	55	KIRCHNERIELLA	281
EUGLENA	8	SYNEDRA	55	CHROOCOCCUS	156
FLAGELLATES	8	OSCILLATORIA	55	NAVICULA	62
STAURONEIS	8	DINOBRYON	28	RAPHIDIOPSIS	62
		ASTERIONELLA	28	MALLOMONAS	62
OTHER	0	OTHER	0	OTHER	95
TOTAL	41	TOTAL	221	TOTAL	718

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	34065.	**********	140.	302875.	337080.
NITROGEN	73175.	**********	5185.	5152140.	5230500.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	202050.	40.	9.78
NITROGEN	2262705.	57.	151.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
FLINT RIVER	126.000	8780.1	0.073	1.165	32.	532.
LIME CREEK	2.000	176.1	0.036	0.768	13.	284.
SWIFT CREEK	1.700	152.8	0.034	1.726	12.	619.
CEDAR CREEK	1.300	114.0	0.033	1.106	12.	409.
GULLY CREEK	0.400	38.8	0.111	2.236	41.	829.
GUM CREEK	2.200	194.2	0.487	2.344	48.	598.
LIMESTONE CREEK	0.800	62.2	0.048	1.251	19.	489.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN GEORGIA

NAME - BLUE RIDGE LAKE (OLIGO-MESOTROPHIC)
COUNTY - FANNIN
STORET NO. - 1316 WORKING PAPER NO. 284. NTIS ACCESSION NO. PB-251 772/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	600.80	13.44	18.4	16.300	176.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
10.	16.	2.7	0.010	0.004	0.105	0.240

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(6/27/73) P	(9/15/73) P	(11/12/73) P
3.1	0.1			

SUMMARY OF PHYTOPLANKTON DATA

6/27/73 GENERA	COUNT	9/15/73 GENERA	COUNT	11/12/73 GENERA	COUNT
ASTERIONELLA	376	TABELLARIA	1769	CYCLOTELLA	48
TABELLARIA	229	FLAGELLATES	136	CENTRIC DIATOM	48
COSMARIUM	64	BLUE-GREEN FILAMENT	27	ANACYSTIS(MICROCYSTIS)	19
PERIDINIUM	37			ANABAENA	10
FLAGELLATES	37			MELOSIRA	10
OTHER	9	OTHER	1	OTHER	9
TOTAL	752	TOTAL	1933	TOTAL	144

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	12200.	12200.
NITROGEN	**********	**********	**********	363250.	363250.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	7810.	36.	0.91
NITROGEN	181025.	50.	27.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CHARLIE CREEK	0.300	10.1	0.018	0.769	15.	653.
TOCCOA RIVER	13.500	461.0	0.024	0.716	21.	617.
WILSCOT CREEK	1.100	36.8	0.031	0.487	27.	409.
STAR CREEK	0.300	11.1	0.021	0.729	18.	631.
STANLEY CREEK	0.500	17.1	0.010	0.470	9.	402.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN GEORGIA

NAME - BURTON LAKE (OLIGO-MESOTROPHIC)
COUNTY - RABUN
STORET NO. - 1318 WORKING PAPER NO. 285. NTIS ACCESSION NO. PB-250 703/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	297.90	11.23	11.9	9.600	161.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
10.	18.	3.4	0.007	0.003	0.100	0.270

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(6/28/73) P	(9/18/73) P	(11/10/73) P
2.7	0.1			

SUMMARY OF PHYTOPLANKTON DATA

6/28/73 GENERA	COUNT	9/18/73 GENERA	COUNT	11/10/73 GENERA	COUNT
FLAGELLATES	103	GLOEOCYSTIS	139	LYNGBYA	398
PERIDINIUM	52	KIRCHNERIELLA	123	ASTERIONELLA	121
MALLOMONAS	30	CYCLOTELLA	92	MELOSIRA	86
OSCILLATORIA	30	MERISMOPEDIA	92	ANKISTRODESMUS	69
DINOBRYON	15	PERIDINIUM	31	ANACYSTIS(MICROCYSTIS)	35
OTHER	29	OTHER	139	OTHER	119
TOTAL	259	TOTAL	616	TOTAL	828

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	215.	4240.	4455.
NITROGEN	**********	**********	8120.	158500.	166620.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	2005.	55.	0.40
NITROGEN	108855.	35.	14.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
TALLULAH RIVER	5.000	147.6	0.014	0.570	14.	572.
WILDCAT CREEK	0.600	16.1	0.008	0.422	8.	425.
MOCCASIN CREEK	0.700	20.7	0.015	0.466	15.	456.
DICKS CREEK	0.600	17.9	0.009	0.342	9.	336.
POPCORN CREEK	0.500	15.0	0.008	0.353	8.	348.
TIMPSON CREEK	0.900	27.7	0.026	0.615	25.	599.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN GEORGIA

NAME - CHATUGE LAKE (MESOTROPHIC)
COUNTY - TOWNS, GA; CLAY, NC
STORET NO. - 1303 WORKING PAPER NO. 286, NTIS ACCESSION NO. PB-250 691/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	489.50	28.94	10.6	12.000	296.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
10.	23.	3.0	0.014	0.005	0.110	0.330

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
6.3	0.1 - 0.1 (2)	(6/29/73) P	(9/12/73) P	(11/10/73) P

SUMMARY OF PHYTOPLANKTON DATA

6/29/73 GENERA	COUNT	9/12/73 GENERA	COUNT	9/12/73 GENERA	COUNT	11/10/73 GENERA	COUNT
OSCILLATORIA	322	LYNGBYA	1859	LYNGBYA	1935	ANABAENA	303
DINOFLAGELLATES	231	CHROOCOCCUS	1180	TABELLARIA	630	MELOSIRA	288
TABELLARIA	131	TABELLARIA	400	APHANIZOMENON	557	CENTRIC DIATOM	80
ASTERIONELLA	70	APHANIZOMENON	140	MELOSIRA	235	PERIDINIUM	32
ROYA	70	APHANOCAPSA	140	CHLAMYDOMONAS	117	DINOBRYON	32
OTHER	261	OTHER	479	OTHER	381	OTHER	95
TOTAL	1085	TOTAL	4198	TOTAL	3855	TOTAL	830

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	460.	**********	70.	10790.	11320.
NITROGEN	1375.	**********	2665.	260505.	264545.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	8000.	29.	0.39
NITROGEN	188910.	29.	9.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
HOG CREEK	0.400	15.3	0.028	0.458	21.	340.
HIWASSEE RIVER	3.800	119.1	0.023	0.573	23.	569.
FODDER CREEK	0.600	28.0	0.020	0.458	15.	336.
SHOOTING CREEK	2.500	98.4	0.029	0.737	24.	600.
BELL CREEK	0.500	20.7	0.033	0.687	24.	492.
HIGHTOWER CREEK	2.100	85.0	0.032	0.576	25.	457.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN GEORGIA

NAME - CLARK HILL RESERVOIR (MESOTROPHIC--EUTROPHIC)
COUNTY - COLUMBIA, ET. AL., .; GA: ABBEVILLE, ET. AL.; SC
STORET NO. - 1304 WORKING PAPER NO. 287. NTIS ACCESSION NO. PB-262 875/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	15893.20	283.29	10.9	264.420	136.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
18.	50.	1.5	0.024	0.007	0.150	0.430

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
6.7	0.1 - 0.3 (3)	(6/23/73) P	(9/11/73) P	(11/12/73) N

SUMMARY OF PHYTOPLANKTON DATA

6/23/73 GENERA	COUNT	9/ 8/73 GENERA	COUNT	11/12/73 GENERA	COUNT
LYNGBYA	491	RAPHIDIOPSIS	6374	DACTYLOCOCCOPSIS	607
APHANIZOMENON	362	LYNGBYA	4976	LYNGBYA	173
CRYPTOMONAS	285	OSCILLATORIA	1342	MALLOMONAS	156
SYNEDRA	207	DACTYLOCOCCOPSIS	1286	CRYPTOMONAS	121
MELOSIRA	207	ANACYSTIS(MICROCYSTIS)	1174	SYNEDRA	69
OTHER	1371	OTHER	3351	OTHER	295
TOTAL	2923	TOTAL	18503	TOTAL	1421

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	90520.	**********	75.	360005.	450600.
NITROGEN	347585.	**********	2905.	5541700.	5892190.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	171255.	62.	1.59
NITROGEN	7196700.	LOSS	20.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
HAWE CREEK	0.170	18.1	0.033	0.862	10.	250.
LONG CANE CREEK	5.400	510.2	0.140	0.727	38.	218.
BOLD BRANCH	0.340	36.3	0.025	0.532	7.	150.
LITTLE RIVER (01)	8.710	805.5	0.088	0.689	24.	219.
SAVANNAH RIVER	175.440	7459.2	0.038	0.639	20.	417.
NEWFORD CREEK	0.650	72.5	0.026	0.951	7.	155.
BROAD RIVER	50.140	3859.1	0.089	0.891	29.	330.
FISHING CREEK	1.890	217.6	0.039	0.852	11.	231.
SOAP CREEK	0.680	82.9	0.029	0.818	8.	143.
DRY FORK CREEK	0.240	28.5	0.036	1.149	10.	211.
GERMANY CREEK	0.730	88.1	0.045	0.553	13.	162.
MATTOX CREEK	0.510	62.2	0.054	0.627	15.	183.
MIDDLE CREEK	0.740	90.6	0.050	0.475	14.	138.

HART CREEK	0.740	95.8	0.027	0.623	7.	170.
LITTLE RIVER (U1)	10.010	1051.5	0.114	0.659	33.	211.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN GEORGIA

NAME - LAKE HARDING (EUTROPHIC)
COUNTY - HARRIS, GA; CHAMBERS, LEE, AL
STORET NO. - 1317 WORKING PAPER NO. 282, NTIS ACCESSION NO. PB-252 070/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	10982.00	23.67	9.4	185.800	14.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
17.	59.	0.8	0.114	0.045	0.640	0.880

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
7.4	**********	(6/11/73) P AND N (8/29/73) P AND N (10/31/73) N

SUMMARY OF PHYTOPLANKTON DATA

6/11/73 GENERA	COUNT	8/29/73 GENERA	COUNT	10/31/73 GENERA	COUNT
CYCLOTELLA	168	RAPHIDIOPSIS	6110	MELOSIRA	445
OSCILLATORIA	152	ANAPAENOPSIS	710	SCENEDESMUS	380
MELOSIRA	92	MERISMOPEDIA	494	MERISMOPEDIA	254
CRYPTOMONAS	76	SCENEDESMUS	494	CHROOCOCCUS	233
NITZSCHIA	61	OSCILLATORIA	370	DACTYLOCOCCOPSIS	212
OTHER	248	OTHER	1913	OTHER	508
TOTAL	797	TOTAL	10091	TOTAL	2032

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	31190.	**********	325.	1358875.	1390390.
NITROGEN	86675.	**********	12170.	6923805.	7022650.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	648575.	53.	58.74
NITROGEN	6026685.	14.	296.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CHATTAHOOCHEE RIVER	165.200	9479.4	0.268	1.287	139.	667.
MOUNTAIN OAK CREEK	2.500	178.7	0.055	0.628	19.	296.
HALAWAKEE CREEK	2.800	199.4	0.039	0.847	18.	402.
OSANIPPA CREEK	4.400	318.6	0.150	1.239	69.	580.
FLAT SHOAL CREEK	8.000	577.6	0.040	0.699	13.	322.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN GEORGIA

NAME - HIGH FALLS POND (EUTROPHIC)
COUNTY - BUTTS, LAMAR, MONROE
STORET NO. - 1319 WORKING PAPER NO. 289. NTIS ACCESSION NO. PB-246 634/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	533.30	2.43	3.7	7.500	14.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
34.	80.	1.0	0.047	0.009	0.115	0.830

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
15.1	0.1	(6/22/73) P	(9/ 8/73) P	(11/ 7/73) N

SUMMARY OF PHYTOPLANKTON DATA

6/22/73 GENERA	COUNT	9/ 8/73 GENERA	COUNT	11/ 8/73 GENERA	COUNT
GOLENKINIA	266	DACTYLOCOCCOPSIS	6995	FLAGELLATES	959
LYNGBYA	251	OSCILLATORIA	1454	DACTYLOCOCCOPSIS	806
ANACYSTIS(MICROCYSTIS)	133	LYNGBYA	1385	CRYPTOMONAS	457
NITZSCHIA	103	RAPHIDIOPSIS	762	MESOSTIGMA	436
STAURASTRUM	89	MERISMOPEDIA	554	GLENODINIUM	261
OTHER	1048	OTHER	2176	OTHER	1110
TOTAL	1890	TOTAL	13326	TOTAL	4029

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	12495.	**********	5.	7105.	19605.
NITROGEN	21465.	**********	130.	173280.	194875.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	14915.	24.	8.07
NITROGEN	189415.	3.	80.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
TOWALIGA RIVER	5.600	383.3	0.107	0.945	14.	357.
HUCK CREEK	1.400	101.0	0.025	0.522	11.	229.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN GEORGIA

NAME - JACKSON LAKE (EUTROPHIC)
COUNTY - BUTTS, JASPER, NEWTON
STORET NO. - 1309 WORKING PAPER NO. 290. NTIS ACCESSION NO. PB-252 071/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	3627.10	19.22	6.9	49.600	31.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
22.	70.	1.0	0.094	0.027	0.530	0.980

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
14.6	18.8	(7/ 1/73) P AND N (9/ 8/73) P AND N (11/13/73) N

SUMMARY OF PHYTOPLANKTON DATA

7/ 1/73 GENERA	COUNT	9/ 8/73 GENERA	COUNT	11/13/73 GENERA	COUNT
ANACYSTIS(MICROCYSTIS)	382	RAPHIDIOPSIS	17771	MERISMOPEDIA	662
OSCILLATORIA	376	ANACYSTIS(MICROCYSTIS)	2399	ANACYSTIS(MICROCYSTIS)	639
PENNATE DIATOMS	361	ANABAENOPSIS	1955	ANKISTRODESMUS	388
ANABAENA	302	MERISMOPEDIA	711	CRYPTOMONAS	297
SCENEDESMUS	155	LYNGBYA	444	GREEN CELLS	274
OTHER	515	OTHER	2755	OTHER	1074
TOTAL	2091	TOTAL	26035	TOTAL	3334

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	426005.	**********	415.	215050.	641470.
NITROGEN	953010.	**********	15580.	1389515.	2358105.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	237520.	63.	33.38
NITROGEN	1586280.	33.	122.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
TUSSAHAW CREEK	2.600	186.5	0.032	0.711	13.	300.
SOUTH RIVER	20.500	1409.0	0.859	2.473	117.	471.
YELLOW RIVER	15.200	1160.3	0.178	0.822	32.	317.
ALCOVEY RIVER	8.600	660.4	0.055	0.857	10.	318.
BEAR CREEK	1.100	77.7	0.051	0.909	23.	405.

COMPENDIUM OF NATIONAL EUTHOPHICATION SURVEY LAKES IN GEORGIA

NAME - NOTTELY RES. (MESOTROPHIC)
COUNTY - UNION
STORET NO. - 1311 WORKING PAPER NO. 291. NTIS ACCESSION NO. PB-252 072/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	557.00	17.36	13.1	11.400	231.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
11.	27.	2.4	0.015	0.004	0.130	0.325

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
6.7	0.1	(6/27/73) P	(9/12/73) P	(11/12/73) P

SUMMARY OF PHYTOPLANKTON DATA

6/27/73 GENERA	COUNT	9/12/73 GENERA	COUNT	11/12/73 GENERA	COUNT
TABELLARIA	1106	CHROMULINA	1037	SYNEDRA	177
CYCLOTELLA	91	TABELLARIA	1010	CENTRIC DIATOM	177
FLAGELLATES	91	LYNGBYA	1010	TABELLARIA	157
ANABAENA	78	SYNEDRA	491	FLAGELLATES	98
SYNEDRA	65	FLAGELLATES	437	CRYPTOMONAS	79
OTHER	104	OTHER	1173	OTHER	236
TOTAL	1535	TOTAL	5158	TOTAL	924

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	555.	**********	35.	12470.	13060.
NITROGEN	1670.	**********	1290.	294885.	297845.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	8000.	39.	0.75
NITROGEN	297710.	0.	17.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BUTTERNUT CREEK	0.500	31.1	0.034	0.980	12.	489.
NOTTELY RIVER	5.600	217.3	0.034	0.897	27.	696.
YOUNGCANE CREEK	1.400	71.5	0.037	0.619	22.	358.
IVYLOG CREEK	0.800	43.3	0.035	0.759	19.	400.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN GEORGIA

NAME - SIDNEY LANIER LAKE (MESOTROPHIC)
COUNTY - DAWSON, FORSYTH, GWINNETT, HALL, LUMPKIN
STORET NO. - 1310 WORKING PAPER NO. 293. NTIS ACCESSION NO. PB-251 776/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	2663.30	161.47	19.5	60.400	1.6

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
11.	35.	2.6	0.016	0.004	0.180	0.460

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
5.4	0.1 - 4.6 (4)	(6/29/73) P	(9/13/73) P	(11/19/73) P AND N

SUMMARY OF PHYTOPLANKTON DATA

6/29/73 GENERA	COUNT	9/13/73 GENERA	COUNT	11/ 9/73 GENERA	COUNT
FRAGILARIA	132	LYNGBYA	2502	MELOSIRA	205
CRYPTOMONAS	38	ANACYSTIS(MICROCYSTIS)	287	CYCLOTELLA	86
MELOSIRA	38	SYNEDRA	137	GREEN CELLS	51
CYCLOTELLA	38	DACTYLOCOCCOPSIS	123	LYNGBYA	51
GYMNODINIUM	28	CRYPTOMONAS	55	ASTERIONELLA	34
OTHER	85	OTHER	343	OTHER	102
TOTAL	359	TOTAL	3447	TOTAL	529

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	78100.	**********	410.	80125.	158635.
NITROGEN	229325.	**********	15275.	1479785.	1724385.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	16880.	89.	0.98
NITROGEN	1385530.	20.	10.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CHATTAHOOCHEE RIVER	28.400	1113.7	0.050	0.717	21.	485.
CHESTATEE RIVER	15.800	613.8	0.069	0.623	46.	456.
WAHOO CREEK	1.800	64.7	0.072	0.931	60.	774.
WEST FORK LITTLE RIVER	0.900	46.6	0.055	1.072	32.	617.
EAST FORK LITTLE RIVER	0.800	41.4	0.062	1.295	36.	748.
FLAT CREEK (F1)	0.300	15.5	2.234	10.324	32.*	614.*
LIMESTONE CREEK	0.200	10.4	0.158	1.036	32.*	614.*
FLAT CREEK (H1)	1.000	46.6	0.041	0.739	26.	477.
FOUR MILE CREEK	0.300	20.7	0.052	1.293	27.	663.

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN GEORGIA

NAME - SINCLAIR LAKE (EUTROPHIC)
COUNTY - BALDWIN, HANCOCK, PUTNAM
STORET NO. - 1313 WORKING PAPER NO. 294, NTIS ACCESSION NO. PB-252 073/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	7510.90	62.17	6.6	89.300	53.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
23.	62.	1.5	0.028	0.005	0.230	0.530

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
8.0	0.2 - 0.4 (2)	(7/ 1/73) P (9/ 8/73) P (11/13/73) P AND N

SUMMARY OF PHYTOPLANKTON DATA

7/ 1/73 GENERA	COUNT	9/ 8/73 GENERA	COUNT	11/13/73 GENERA	COUNT
SYNEDRA	618	RAPHIDIOPSIS	1502	RAPHIDIOPSIS	468
RAPHIDIOPSIS	556	LYNGBYA	928	CHROOCOCCUS	324
FLAGELLATES	371	DACTYLOCOCCOPSIS	560	SCENEDESMUS	234
NITZSCHIA	247	MOUGEOTIA	221	MOUGEOTIA	144
ANABAENA	227	SYNEDRA	133	TETRAEDRON	108
OTHER	1381	OTHER	441	OTHER	917
TOTAL	3400	TOTAL	3785	TOTAL	2195

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	13285.	**********	360.	242425.	256070.
NITROGEN	21910.	**********	13535.	2510005.	2545450.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	175555.	31.	4.12
NITROGEN	2698035.	LOSS	40.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
MURDER CREEK	5.400	505.0	0.069	0.586	12.	184.
LITTLE RIVER	7.700	725.2	0.082	1.033	27.	339.
HOOTY CREEK	1.200	103.6	0.281	1.173	73.	354.
CROOKED CREEK	0.700	69.9	0.075	0.811	19.	265.
SHOULDERBONE CREEK	2.900	253.8	0.050	0.611	20.	249.
FORT CREEK	1.100	93.2	0.022	0.574	9.	240.
OCONEE RIVER	61.200	4739.7	0.101	0.935	40.	373.
BIG CEDAR CREEK	3.400	334.1	0.050	0.499	12.	155.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ILLINOIS

NAME - BALDWIN LAKE (EUTROPHIC)
COUNTY - RANDOLPH
STORET NO. - 1763 WORKING PAPER NO. 295. NTIS ACCESSION NO. PB-250 699/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	12.60	8.00	3.1	0.900	7.9

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
115.	492.	1.0	0.044	0.007	0.140	0.840

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 7/73) P	(8/10/73) P	(10/17/73) P
11.3	0.1			

SUMMARY OF PHYTOPLANKTON DATA

5/ 7/73 GENERA	COUNT	8/10/73 GENERA	COUNT	10/17/73 GENERA	COUNT
KIRCHNERIELLA	866	NITZSCHIA	921	OSCILLATORIA	1417
OSCILLATORIA	784	MERISMOPEDIA	877	ANACYSTIS(MICROCYSTIS)	945
ANACYSTIS(MICROCYSTIS)	757	ANACYSTIS(MICROCYSTIS)	405	CYCLOTELLA	420
SCENEDESMUS	649	LYNGBYA	360	MELOSIRA	314
TETRASTRUM	649	CYCLOTELLA	247	MERISMOPEDIA	210
OTHER	650	OTHER	650	OTHER	1365
TOTAL	4355	TOTAL	3460	TOTAL	4671

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	60.	**********	**********	4565.	4625.
NITROGEN	310.	**********	**********	56265.	56575.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	90.	98.	0.58
NITROGEN	4075.	93.	7.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UNNAMED STREAM (A1)	0.020	4.0	0.151	1.860	24.	293.
PUMP.FR. KASKASKIA RIVER	0.700	**********	0.197	1.830	**********	**********

LAKE - BLOOMINGTON LAKE (EUTROPHIC)
COUNTY - MCLEAN
STATE NO. - 1703 WORKING PAPER NO. 295. NTIS ACCESSION NO. PB-250 700/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	180.88	1.97	5.0	1.100	104.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
19.3.	480.	0.4	0.050	0.020	5.730	0.390

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
24.2	3.3	(5/11/73) P	(8/ 9/73) P	(10/17/73) P

SUMMARY OF PHYTOPLANKTON DATA

5/11/73 GENERA	COUNT	8/ 9/73 GENERA	COUNT	10/17/73 GENERA	COUNT
STEPHANODISCUS	1563	ANACYSTIS(MICROCYSTIS)	2569	CLOSTERIUM	7767
MELOSIRA	700	MELOSIRA	913	CYCLOTELLA	384
FLAGELLATES	280	SYNEDRA	268	APHANIZOMENON	332
CHRYSOMONAS	117	CENTRIC DIATOM	228	CHYPTOMONAS	179
LUNATE CELLS	70	EUGLENA	190	COELASTHUM	128
OTHER	116	OTHER	724	OTHER	286
TOTAL	2946	TOTAL	4892	TOTAL	8976

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	170.	**********	30.	4070.	4270.
NITROGEN	490.	**********	1135.	341255.	342880.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	2939.	31.	2.17
NITROGEN	236795.	LOSS	174.1

C. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
MUNK CREEK	0.498	126.9	0.101	11.260	20.	2207.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ILLINOIS

NAME = CARLYLE RESERVOIR (EUTROPHIC)
COUNTY = BOND, CLINTON, FAYETTE
STORET NO. = 1705

WORKING PAPER NO. 297. NTIS ACCESSION NO. PB-250 950/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	7862.20	105.22	2.7	51.100	64.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
124.	388.	0.6	0.084	0.032	1.270	2.020

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 8/73) P	(8/10/73) P	(10/18/73) P
17.4	8.7			

SUMMARY OF PHYTOPLANKTON DATA

5/ 8/73		8/10/73		10/18/73	
GENERA	COUNT	GENERA	COUNT	GENERA	COUNT
MELOSIRA	1934	MELOSIRA	1023	NAVICULA	707
FLAGELLATES	1862	COCCOID CELLS	833	MELOSIRA	502
STEPHANODISCUS	1573	CYCLOTELLA	530	MERISMOPEDIA	447
CRYPTOMONAS	616	CRUCIGENIA	152	SCENEDESMUS	187
SYNEDRA	255	PENNATE DIATOMS	152	FLAGELLATES	130
OTHER	533	OTHER	456	OTHER	372
TOTAL	6803	TOTAL	3146	TOTAL	2345

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	6480.	**********	20.	307130.	316630.
NITROGEN	27465.	**********	710.	5044240.	5072515.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	193595.	39.	3.01
NITROGEN	4578929.	10.	48.2

V. NONPOINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
KASKASKIA RIVER	38.300	5024.6	0.163	3.929	45.	822.
EAST FK, KASKASKIA RIVER	1.900	292.7	0.230	1.960	44.	425.
LITTLE MUD	0.710	35.5	0.302	2.365	56.	402.
NORTH FORK	0.400	133.1	0.243	2.095	45.	363.
HICKORY CREEK	1.400	220.9	0.134	1.720	25.	380.
CAMP CREEK	0.900	137.5	0.211	1.830	35.	360.
HURRICANE CREEK	3.000	461.0	0.260	2.985	44.	461.
FLAT CREEK	0.400	55.7	0.273	2.305	49.	472.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ILLINOIS

NAME = CEDAR LAKE (MESOTROPHIC)
COUNTY = LAKE
STUDY NO. = 1759 REPORTING PAPER NO. 298. NTIS ACCESSION NO. PB-248 867/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	**********	1.15	1.2	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
IND.	395.	2.5	0.029	0.013	0.170	1.180

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L=>DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
5.4	8.2	(5/ 9/73) P	(8/ 7/73) P	(10/16/73) N

SUMMARY OF PHYTOPLANKTON DATA

5/ 9/73 GENERA	COUNT	8/ 7/73 GENERA	COUNT	10/16/73 GENERA	COUNT
CHLOROPHYTA	660	GOMPHOSPHAERIA	229	DINOBRYON	396
EUGLENOPHYCEAE	119	ANACYSTIS(MICROCYSTIS)	144	APHANIZOMENON	316
FLAGELLATES	44	DINOBRYON	158	ANACYSTIS(MICROCYSTIS)	264
CRYPTOMONAS	28	SCENEDESMUS	136	MERISMOPEDIA	237
CHRYSOPHYTA	24	CHROOCOCCUS	106	CHROOCOCCUS	237
OTHER	154	OTHER	561	OTHER	765
TOTAL	829	TOTAL	1354	TOTAL	2215

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	190.	**********	15.	20.	225.
NITROGEN	270.	**********	555.	1240.	2065.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	0.20
NITROGEN	**********	*****	1.8

**** LAKE SAMPLING ONLY ****

[illegible] = LAKE CHARLESTON (EUTROPHIC)
[illegible] = COLES
[illegible] = 1710 WORKING PAPER NO. 299. NTIS ACCESSION NO. PB-250 584/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	2635.70	1.45	0.9	14.500	1.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
203.	570.	0.2	0.160	0.065	4.680	5.490

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L=DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
17.0	1.7	(5/ 7/73) P (8/ 9/73) P (10/18/73) P

SUMMARY OF PHYTOPLANKTON DATA

5/ 7/73		8/ 9/73		10/18/73	
GENERA	COUNT	GENERA	COUNT	GENERA	COUNT
CRYPTOMONAS	202	FLAGELLATES	2776	EUGLENA	5010
SYNEDRA	84	STEPHANODISCUS	882	STEPHANODISCUS	1160
FLAGELLATES	84	MELOSIRA	493	PHACUS	740
EUGLENA	56	EUGLENA	337	CHLAMYDOMONAS	550
PENNULARIA	56	ACTINASTRUM	104	PENNATE DIATOMS	370
OTHER	142	OTHER	260	OTHER	1140
TOTAL	734	TOTAL	4852	TOTAL	8970

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	10430.	**********	**********	65715.	76145.
NITROGEN	30265.	**********	65.	3424695.	3455125.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	78115.	LOSS	52.51
NITROGEN	2882670.	17.	2382.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
EMBARRAS RIVER	13.300	1864.8	0.158	7.848	32.	1683.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ILLINOIS

NAME - COFFEEN LAKE (EUTROPHIC)
COUNTY - MONTGOMERY
STORET NO. - 1711 WORKING PAPER NO. 300. NTIS ACCESSION NO. PB-250 577/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (MONTHS)
IMPOUNDMENT	**********	4.86	5.6	**********	3.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
76.	585.	1.1	0.032	0.012	0.260	0.910

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 7/73)	(8/10/73)	(10/18/73)
7.7	0.7	P	P	N

SUMMARY OF PHYTOPLANKTON DATA

5/ 7/73 GENERA	COUNT	8/10/73 GENERA	COUNT	10/18/73 GENERA	COUNT
NITZSCHIA	7837	OSCILLATORIA	2825	NITZSCHIA	271
FLAGELLATES	635	NITZSCHIA	900	CYCLOTELLA	204
CENTRIC DIATOM	282	RAPHIDIOPSIS	300	ANKISTRODESMUS	115
LUNATE CELLS	247	DACTYLOCOCCOPSIS	177	OSCILLATORIA	89
OSCILLATORIA	177	SCENEDESMUS	71	LYNGBYA	80
OTHER	353	OTHER	159	OTHER	30
TOTAL	9531	TOTAL	4432	TOTAL	789

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	40.	**********	**********	85.	125.
NITROGEN	275.	**********	**********	5250.	5525.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	0.03
NITROGEN	**********	*****	1.1

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ILLINOIS

NAME - CRAB ORCHARD LAKE (EUTROPHIC)
COUNTY - JACKSON, WILLIAMSON
STORET NO. - 1712 WORKING PAPER NO. 301. NTIS ACCESSION NO. PB-250 101/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	520.68	28.19	3.0	3.400	288.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
93.	265.	0.5	0.082	0.013	0.200	0.910

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 8/73) P	(8/ 8/73) N	(10/19/73) N
59.9	**********			

SUMMARY OF PHYTOPLANKTON DATA

GENERA	5/ 8/73 COUNT	GENERA	8/ 8/73 COUNT	GENERA	10/19/73 COUNT
CYCLOTELLA	12226	OSCILLATORIA	30614	COCCOID CELLS	33481
MELOSIRA	7763	DACTYLOCOCCOPSIS	21930	DACTYLOCOCCOPSIS	8830
CRYPTOMONAS CELLS	2474	COCCOID CELLS	10350	OSCILLATORIA	7358
DACTYLOCOCCOPSIS	776	CYCLOTELLA	7281	PENNATE DIATOMS	4139
CRYPTOMONAS	679	PENNATE DIATOMS	7281	ANACYSTIS(MICROCYSTIS)	4047
OTHER	3185	OTHER	32806	OTHER	11589
TOTAL	27023	TOTAL	110262	TOTAL	69444

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	20860.	**********	15.	58460.	79355.
NITROGEN	62988.	**********	570.	303900.	367070.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	16189.	80.	2.82
NITROGEN	164625.	55.	13.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CRAB ORCHARD CREEK	1.400	213.9	1.668	3.654	221.	614.
PIGEON CREEK	0.100	10.3	0.663	3.051	16.*	460.*
GULF CREEK	0.200	33.2	0.089	2.236	16.	460.
PIN OAK CREEK	0.030	4.6	3.445	9.098	16.*	460.*

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ILLINOIS

NAME - LAKE DECATUR (EUTROPHIC)
COUNTY - MACON
STORET NO. - 1716 WORKING PAPER NO. 302. NTIS ACCESSION NO. PB-248 888/AB

I. MORPHOMETRY

	LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
	IMPOUNDMENT	2629.40	11.35	1.4	17.400	11.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
210.	530.	0.5	0.129	0.062	3.750	5.160

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 8/73) P	(8/ 9/73) P	(10/18/73) P
43.0	**********			

SUMMARY OF PHYTOPLANKTON DATA

5/ 8/73 GENERA	COUNT	8/ 9/73 GENERA	COUNT	10/18/73 GENERA	COUNT
MELOSIRA	256	CENTRIC DIATOM	1116	NITZSCHIA	1855
SCENEDESMUS	160	NITZSCHIA	950	CYCLOTELLA	909
CRYPTOMONAS	160	FLAGELLATES	868	MELOSIRA	795
CYCLOTELLA	160	MELOSIRA	678	MERISMOPEDIA	719
DACTYLOCOCCOPSIS	64	EUGLENA	271	FLAGELLATES	416
OTHER	320	OTHER	1190	OTHER	1856
TOTAL	1120	TOTAL	5073	TOTAL	6550

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	8390.	**********	**********	95455.	103845.
NITROGEN	10410.	**********	**********	2711550.	2721960.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	77020.	26.	9.15
NITROGEN	2242930.	LOSS	239.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SANGAMON RIVER	14.300	2004.7	0.162	4.998	41.	1115.
UNNAMED CREEK (R1)	0.100	21.9	0.122	6.399	31.	1239.
BIG CREEK	0.800	121.7	0.153	5.292	37.	1049.
FINLEY CREEK	0.400	68.6	0.490	5.918	37.	1089.
SAND CREEK	0.100	19.9	0.127	6.955	31.	1212.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ILLINOIS

NAME - DEPUE LAKE (EUTROPHIC)
COUNTY - BUREAU
STORET NO. - 1752 WORKING PAPER NO. 303. NTIS ACCESSION NO. PB-248 889/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	**********	2.12	1.2	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
240.	675.	0.3	0.438	0.276	4.050	4.930

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/12/73) P	(8/ 7/73) N	(10/16/73) N
58.8	**********			

SUMMARY OF PHYTOPLANKTON DATA

5/12/73 GENERA	COUNT	8/ 7/73 GENERA	COUNT	10/16/73 GENERA	COUNT
FLAGELLATES	14594	EUGLENA	3469	EUGLENA	3065
CYCLOTELLA	1351	CYCLOTELLA	1667	PHACUS	1008
DINOBRYON	721	STEPHANODISCUS	1429	CRYPTOMONAS	777
STEPHANODISCUS	450	ACTINASTRUM	1157	NAVICULA	693
RAPHIDIOPSIS	368	PHACUS	646	ACTINASTRUM	504
OTHER	1713	OTHER	3930	OTHER	2644
TOTAL	19189	TOTAL	12298	TOTAL	8691

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ILLINOIS

NAME - EAST LOON LAKE (EUTROPHIC)
COUNTY - LAKE
STORET NO. - 1757 WORKING PAPER NO. 304. NTIS ACCESSION NO. PB-248 890/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	25.90	0.67	1.8	0.160	89.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
172.	465.	1.3	0.076	0.018	0.120	1.445

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 9/73) N	(8/ 7/73) N	(10/16/73) N
22.3	**********			

SUMMARY OF PHYTOPLANKTON DATA

5/ 9/73 GENERA	COUNT	8/ 7/73 GENERA	COUNT	10/16/73 GENERA	COUNT
DINOBRYON	1108	LYNGBYA	3981	APHANIZOMENON	2110
FLAGELLATES	1041	ARTHROSPIRA	1175	MELOSIRA	361
FRAGILARIA	860	MERISMOPEDIA	682	ANACYSTIS(MICROCYSTIS)	216
ANABAENA	588	ANACYSTIS(MICROCYSTIS)	492	GOMPHOSPHAERIA	180
CRYPTOMONAS	271	OSCILLATORIA	417	CRYPTOMONAS	108
OTHER	951	OTHER	3110	OTHER	669
TOTAL	4819	TOTAL	9857	TOTAL	3644

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ILLINOIS

NAME - FOX LAKE (CHAIN)* (EUTROPHIC)
COUNTY - LAKE
STORET NO. - 1755 WORKING PAPER NO. 305. NTIS ACCESSION NO. PB-250 415/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	3120.90	6.76	2.4	22.500	23.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
282.	510.	0.4	0.219	0.083	0.375	2.140

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 9/73) N	(8/ 7/73) N	(10/16/73) N
61.8	**********			

SUMMARY OF PHYTOPLANKTON DATA

5/ 9/73 GENERA	COUNT	8/ 7/73 GENERA	COUNT	10/16/73 GENERA	COUNT
STEPHANODISCUS	2166	APHANIZOMENON	2631	MELOSIRA	2668
DINOBRYON	2055	MELOSIRA	1014	APHANIZOMENON	617
ASTERIONELLA	1201	STEPHANODISCUS	992	CYCLOTELLA	309
CYCLOTELLA	800	ANACYSTIS(MICROCYSTIS)	324	OOCYSTIS	309
CRYPTOMONAS	800	OSCILLATORIA	259	ANACYSTIS(MICROCYSTIS)	272
OTHER	2254	OTHER	992	OTHER	1033
TOTAL	9276	TOTAL	6212	TOTAL	5208

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	21380.	415.	640.	142555.	164990.
NITROGEN	58045.	5750.	24055.	2049180.	2137030.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	153275.	7.	8.10**
NITROGEN	1995175.	7.	104.9**

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SUTTON CREEK	0.500	99.7	0.486	3.427	92.	650.
SQUAW CREEK	0.200	35.7	0.921	4.714	104.	727.
FOX RIVER	16.200	2255.9	0.200	3.600	45.	644.
UNNAMED CREEK	3.400	528.4	0.193	3.756	40.	685.

* FOX CHAIN OF LAKES: FOX, GRASS, MARIE, AND PISTAKEE LAKES.

** RATE FOR THE 4-LAKE CHAIN.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ILLINOIS

NAME = GRASS LAKE (EUTROPHIC)
COUNTY = LAKE ***** FOR INFLOW AND LOADING DATA SEE FOX LAKE (1755)
STORET NO. = 1756 WORKING PAPER NO. 305. NTIS ACCESSION NO. PB-250 415/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	**********	5.50	1.1	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
260.	560.	0.5	0.301	0.093	0.820	2.430

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A	ALGAL ASSAY CONTROL YIELD (MG/L-DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
81.5	**********	(5/ 9/73) N	(8/ 7/73) N	(10/16/73) N

SUMMARY OF PHYTOPLANKTON DATA

5/ 9/73 GENERA	COUNT	8/ 7/73 GENERA	COUNT	10/16/73 GENERA	COUNT
DINOBRYON	2723	CYCLOTELLA	10253	CYCLOTELLA	4048
COCCOID CELLS	1808	COSCINODISCUS	7098	CENTRIC DIATOM	4048
CYCLOTELLA	1362	MELOSIRA	1627	MELOSIRA	3889
FLAGELLATES	426	SCENEDESMUS	986	FLAGELLATES	1944
OSCILLATORIA	737	NITZSCHIA	690	DACTYLOCOCCOPSIS	1071
OTHER	2811	OTHER	5274	OTHER	2779
TOTAL	10267	TOTAL	25928	TOTAL	17779

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ILLINOIS

NAME - LAKE MARIE (EUTROPHIC)
COUNTY - LAKE ***** FOR THIS AND LOADING DATA SEE FOX LAKE (1755)
STORET NO. - 1727 WORKING PAPER NO. 305. NTIS ACCESSION NO. PB-250 415/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	**********	1.84	1.4	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
201.	496.	0.8	0.098	0.057	0.370	1.880

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 9/73) N	(8/ 7/73) N	(10/16/73) N
39.6	**********			

SUMMARY OF PHYTOPLANKTON DATA

5/ 9/73 GENERA	COUNT	8/ 7/73 GENERA	COUNT	10/16/73 GENERA	COUNT
ASTERIONELLA	2233	APHANIZOMENON	2015	APHANIZOMENON	4294
APHANIZOMENON	918	OSCILLATORIA	1670	CRYPTOMONAS	577
DINOBRYON	658	ANABAENA	371	STEPHANODISCUS	197
CRYPTOMONAS	480	MELOSIRA	345	ANACYSTIS(MICROCYSTIS)	152
MELOSIRA	301	ANACYSTIS(MICROCYSTIS)	106	OOCYSTIS	152
OTHER	959	OTHER	504	OTHER	485
TOTAL	5549	TOTAL	5011	TOTAL	5857

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ILLINOIS

[illegible] = [illegible] (EUTROPHIC)
[illegible] = LAKE ***** FOR INFO AND LOADING DATA SEE FOR LAKE (1755)
[illegible] = 1733 WORKING PAPER NO. 305. NTIS ACCESSION NO. PB-250 415/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	**********	6.27	3.2	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
[illegible]	520.	0.4	0.203	0.062	0.370	1.660

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
[illegible]	**********	(5/ 9/73) N	(8/ 7/73) N	(10/16/73) N

SUMMARY OF PHYTOPLANKTON DATA

5/ 9/73 GENERA	COUNT	8/ 7/73 GENERA	COUNT	10/16/73 GENERA	COUNT
CHLORELLA	1275	APHANIZOMENON	3769	MELOSIRA	5618
MELOSIRA	484	MELOSIRA	1979	APHANIZOMENON	995
ASTERIONELLA	748	STEPHANODISCUS	1005	ANACYSTIS(MICROCYSTIS)	468
CYCLOTELLA	658	ANACYSTIS(MICROCYSTIS)	502	COELASTRUM	204
STEPHANODISCUS	617	DICTYOSPHAERIUM	229	CHROOCOCCUS	176
OTHER	3268	OTHER	1631	OTHER	1200
TOTAL	7442	TOTAL	9106	TOTAL	8661

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ILLINOIS

NAME = HIGHLAND SILVER LAKE (EUTROPHIC)
COUNTY = MADISON
STORET NO. = 1748 WORKING PAPER NO. 306. NTIS ACCESSION NO. PB-248 762/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	122.00	2.99	4.2	0.770	189.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
42.	197.	0.3	0.226	0.057	0.970	1.780

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT.)	LIMITING NUTRIENT AT SAMPLING TIME		
9.8	23.3	(5/ 7/73) N	(8/10/73) P	(10/17/73) P

SUMMARY OF PHYTOPLANKTON DATA

5/ 7/73 GENERA	COUNT	8/10/73 GENERA	COUNT	10/17/73 GENERA	COUNT
FLAGELLATES	801	BLUE-GREEN FILAMENT	469	CENTRIC DIATOM	1378
CRYPTOMONAS	660	MERISMOPEDIA	388	MELOSIRA	418
ELEMODESMUS	167	FLAGELLATES	388	CYCLOTELLA	274
TRACHELOMONAS	59	CYCLOTELLA	265	TRACHELOMONAS	212
EUGLENA	29	MELOSIRA	184	CRYPTOMONAS	103
OTHER	147	OTHER	306	OTHER	727
TOTAL	1702	TOTAL	1980	TOTAL	3112

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	85.	**********	**********	9010.	9095.
NITROGEN	505.	**********	40.	64065.	64570.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	7075.	22.	3.04
NITROGEN	50495.	6.	21.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
LITTLE SILVER CREEK	0.438	100.0	0.376	2.567	75.	511.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ILLINOIS

NAME - HOLIDAY LAKE (EUTROPHIC)
COUNTY - LASALLE
STORET NO. - 1754 WORKING PAPER NO. 307, NTIS ACCESSION NO. PB-248 761/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	168.10	1.21	2.7	1.000	38.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
219.	615.	0.4	0.167	0.046	3.135	4.760

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 9/73) P	(8/ 7/73) P	(10/16/73) N
51.2	6.5			

SUMMARY OF PHYTOPLANKTON DATA

5/ 9/73 GENERA	COUNT	8/ 7/73 GENERA	COUNT	10/16/73 GENERA	COUNT
BLUE-GREEN FILAMENT	160	APHANIZOMENON	9415	CRYPTOMONAS	2620
FLAGELLATES	160	MELOSIRA	1659	STEPHANODISCUS	891
CRYPTOMONAS	114	COELASTRUM	1076	MELOSIRA	262
STEPHANODISCUS	91	STEPHANODISCUS	1031	SCHROEDERIA	157
NAVICULA	68	PHACUS	224	EUGLENA	131
OTHER	318	OTHER	1077	OTHER	891
TOTAL	911	TOTAL	14482	TOTAL	4952

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	2360.	**********	**********	2515.	4875.
NITROGEN	7075.	**********	**********	236760.	243835.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	3185.	35.	4.03
NITROGEN	212665.	13.	201.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SOMONAUK CREEK	0.900	146.1	0.123	7.141	15.	1411.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ILLINOIS

NAME - HORSESHOE LAKE (EUTROPHIC)
COUNTY - MADISON
STORET NO. - 1766 WORKING PAPER NO. 308. NTIS ACCESSION NO. PB-248 891/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	83.10	8.78	2.1	0.500	420.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
74.	560.	0.4	0.127	0.018	0.705	4.420

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 7/73) P	(8/10/73) P	(10/17/73) P
182.2	20.7			

SUMMARY OF PHYTOPLANKTON DATA

5/ 7/73 GENERA	COUNT	8/10/73 GENERA	COUNT	10/17/73 GENERA	COUNT
OSCILLATORIA	53701	RAPHIDIOPSIS	51017	RAPHIDIOPSIS	47913
SYNEDRA	40977	OSCILLATORIA	26167	LYNGBYA	10629
FLAGELLATES	5176	MERISMOPEDIA	12049	FLAGELLATES	4252
MERISMOPEDIA	4745	LYNGBYA	11107	MERISMOPEDIA	4252
SCENEDESMUS	4313	ANABAENOPSIS	6777	PHORMIDIUM	4088
OTHER	12939	OTHER	20330	OTHER	15699
TOTAL	121851	TOTAL	127447	TOTAL	86833

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	25.	4460.	4485.
NITROGEN	**********	**********	875.	30290.	31165.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	3740.	17.	0.51
NITROGEN	82785.	LOSS	3.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UNNAMED STREAM (D1)	0.200	30.8	0.294	1.348	56.	268.
UNNAMED DITCH (E1)	0.060	9.6	0.328	1.552	61.	302.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ILLINOIS

NAME - LONG LAKE (EUTROPHIC)
COUNTY - LAKE
STORET NO. - 1725 WORKING PAPER NO. 309. NTIS ACCESSION NO. PB-252 074/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	99.70	1.03	1.6	0.600	32.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
210.	582.	0.4	0.704	0.398	1.190	2.250

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
49.3	30.6	(5/ 9/73) N	(8/ 7/73) N	(10/16/73) N

SUMMARY OF PHYTOPLANKTON DATA

5/ 9/73 GENERA	COUNT	8/ 7/73 GENERA	COUNT	10/16/73 GENERA	COUNT
STEPHANODISCUS	1091	ANACYSTIS(MICROCYSTIS)	1205	STEPHANODISCUS	1355
CRYPTOMONAS	436	APHANIZOMENON	585	APHANIZOMENON	214
MELOSIRA	236	STEPHANODISCUS	344	FLAGELLATES	186
PEDIASTRUM	18	CRYPTOMONAS	155	BLUE-GREEN FILAMENT	128
SYNEDRA	18	BLUE-GREEN FILAMENT	103	CRYPTOMONAS	106
OTHER	1	OTHER	225	OTHER	453
TOTAL	1800	TOTAL	2617	TOTAL	2442

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	21185.	20.	60.	3105.	24370.
NITROGEN	51525.	15.	2185.	64530.	118255.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	9195.	62.	23.66
NITROGEN	64845.	45.	114.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SQUAW CREEK	0.400	64.1	0.185	3.479	25.	651.
UNNAMED STREAM (C1)	0.100	15.3	3.382	8.448	37.*	674.*
EAGLE CREEK	0.100	11.3	0.385	2.312	54.	531.

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ILLINOIS

NAME - LAKE LOU YAEGER (EUTROPHIC)
COUNTY - MONTGOMERY
STORET NO. - 1726 WORKING PAPER NO. 310. NTIS ACCESSION NO. PB-248 892/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	279.70	5.72	3.3	1.800	121.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
64.	199.	0.3	0.186	0.076	1.600	2.265

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/12/73) P	(8/10/73) P	(10/18/73) P
10.7	**********			

SUMMARY OF PHYTOPLANKTON DATA

5/12/73 GENERA	COUNT	8/10/73 GENERA	COUNT	10/18/73 GENERA	COUNT
CRYPTOMONAS	20	STEPHANODISCUS	94	MELOSIRA	706
SYNEDRA	20	PENNATE DIATOMS	78	CYCLOTELLA	196
NITZSCHIA	20	CYCLOTELLA	47	STEPHANODISCUS	144
FLAGELLATES	20	TRACHELOMONAS	16	COELASTRUM	13
PENNATE DIATOMS	20	MELOSIRA	16	EUGLENA	13
OTHER	0	OTHER	15	OTHER	118
TOTAL	100	TOTAL	266	TOTAL	1190

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	985.	**********	**********	17050.	18035.
NITROGEN	2960.	**********	**********	263670.	266630.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	16025.	11.	3.15
NITROGEN	173835.	35.	46.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
THREE MILE BRANCH	0.600	97.4	0.312	3.631	70.	657.
WEST FORK SHOAL CREEK	0.500	74.3	0.388	6.057	73.	1049.
BLUE GRASS CREEK	0.300	50.0	0.177	7.265	39.	1293.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ILLINOIS

NAME - OLD BEN MINE RESERVOIR (EUTROPHIC)
COUNTY - FRANKLIN
STORET NO. - 1765 WORKING PAPER NO. 311, NTIS ACCESSION NO. PB-248 893/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	**********	0.43	1.2	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
130.	438.	0.6	0.930	0.575	0.205	1.655

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/11/73) N	(8/ 8/73) N	(10/18/73) N
31.4	20.9			

SUMMARY OF PHYTOPLANKTON DATA

5/11/73 GENERA	COUNT	8/ 8/73 GENERA	COUNT	10/18/73 GENERA	COUNT
FLAGELLATES	4759	OSCILLATORIA	6855	STEPHANODISCUS	7011
CYCLOTELLA	1175	CYCLOTELLA	5429	KIRCHNERIELLA	5075
CYLINDROCYSTIS	602	CARTERIA	4362	SCENEDESMUS	4941
SCENEDESMUS	572	MERISMOPEDIA	2037	FLAGELLATES	3472
MALLOMONAS	120	CRYPTOMONAS	1870	CYCLOTELLA	2471
OTHER	724	OTHER	9538	OTHER	5943
TOTAL	7952	TOTAL	30091	TOTAL	28913

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	1925.	**********	**********	10.	1935.
NITROGEN	5785.	**********	**********	465.	6250.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	4.50
NITROGEN	**********	*****	14.5

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ILLINOIS

NAME - RACCOON LAKE (EUTROPHIC)
COUNTY - MARION
STORET NO. - 1762 WORKING PAPER NO. 312. NTIS ACCESSION NO. PB-250 413/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	125.90	3.93	1.2	0.800	72.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
61.	270.	0.4	0.106	0.020	0.310	1.290

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/11/73) P	(8/ 8/73) P	(10/19/73) N
19.2	**********			

SUMMARY OF PHYTOPLANKTON DATA

5/11/73 GENERA	COUNT	8/ 8/73 GENERA	COUNT	10/19/73 GENERA	COUNT
FLAGELLATES	1933	OSCILLATORIA	16712	MERISMOPEDIA	1195
CHRYSOPHYTAN CELLS	1294	DACTYLOCOCCOPSIS	2381	PENNATE DIATOMS	724
CRYPTOMONAS	701	CENTRIC DIATOM	1236	MELOSIRA	702
CENTRIC DIATOM	421	PENNATE DIATOMS	1236	CENTRIC DIATOM	702
TRACHELOMONAS	110	MELOSIRA	1007	OSCILLATORIA	406
OTHER	220	OTHER	5218	OTHER	1042
TOTAL	4679	TOTAL	27790	TOTAL	4771

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	85.	**********	30.	4465.	4580.
NITROGEN	305.	**********	1110.	75405.	76820.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	3270.	29.	1.17
NITROGEN	43970.	43.	19.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
RACCOON CREEK	0.600	90.1	0.191	2.775	36.	583.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ILLINOIS

NAME - REND LAKE (EUTROPHIC)
COUNTY - FRANKLIN, JEFFERSON
STORET NO. - 1735 WORKING PAPER NO. 313. NTIS ACCESSION NO. PB-252 085/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	1300.20	76.49	4.7	9.200	1.2

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
70.	290.	0.7	0.071	0.012	0.210	1.200

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 8/73) P	(8/ 8/73) P	(10/19/73) P
23.5	0.1			

SUMMARY OF PHYTOPLANKTON DATA

5/ 8/73 GENERA	COUNT	8/ 8/73 GENERA	COUNT	10/19/73 GENERA	COUNT
MELOSIRA	6826	CARTERIA	1428	FLAGELLATES	2230
CYCLOTELLA	1365	ANACYSTIS(MICROCYSTIS)	1217	ANACYSTIS(MICROCYSTIS)	1493
CRYPTOMONAS	928	CHLAMYDOMONAS	1124	DACTYLOCOCCOPSIS	1247
FLAGELLATES	928	CYCLOTELLA	936	KIRCHNERIELLA	661
RAPHIDIOPSIS	874	FLAGELLATES	726	SCENEDESMUS	639
OTHER	5407	OTHER	2949	OTHER	2263
TOTAL	16328	TOTAL	8380	TOTAL	8533

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	15130.	**********	**********	59360.	74490.
NITROGEN	23845.	**********	**********	731505.	755350.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	37545.	50.	0.97
NITROGEN	433690.	43.	9.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BIG MUDDY RIVER	3.500	530.9	0.251	2.490	45.	585.
MARCUM BRANCH CREEK	0.050	7.7	0.086	1.842	16.	358.
GUN CREEK	0.200	35.5	0.145	2.124	27.	444.
ATCHISON CREEK	0.200	31.3	0.143	2.138	24.	478.
CASEY FORK	1.500	240.1	0.909	2.996	99.	597.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ILLINOIS

NAME - SANGCHRIS LAKE (EUTROPHIC)
COUNTY - CHRISTIAN
STORET NO. - 1753 WORKING PAPER NO. 314. NTIS ACCESSION NO. PB-250 414/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	188.80	10.93	4.0	1.200	1.2

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
91.	397.	0.6	0.050	0.009	1.970	2.740

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 7/73) P	(8/10/73) P	(10/18/73) P
19.3	7.9			

SUMMARY OF PHYTOPLANKTON DATA

5/ 7/73 GENERA	COUNT	8/10/73 GENERA	COUNT	10/18/73 GENERA	COUNT
MELOSIRA	2718	OSCILLATORIA	52083	MELOSIRA	4613
STEPHANODISCUS	264	DACTYLOCOCCOPSIS	21412	FLAGELLATES	1764
CHRYSOPHYTAN CELLS	171	NITZSCHIA	926	MERISMOPEDIA	779
SYNEDRA	98	CYCLOTELLA	926	SYNEDRA	287
CRYPTOMONAS	73	MELOSIRA	463	CENTRIC DIATOM	410
OTHER	150	OTHER	1967	OTHER	2114
TOTAL	3474	TOTAL	77777	TOTAL	9967

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	270.	**********	5.	3915.	4190.
NITROGEN	1105.	**********	185.	250975.	252265.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	2590.	38.	0.38
NITROGEN	129190.	49.	23.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CLEAR CREEK (EASTERN)	0.200	36.0	0.121	6.624	24.	1318.
UNNAMED CREEK (C1)	0.100	15.5	0.052	6.109	9.	1158.
UNNAMED CREEK (D1)	0.100	20.7	0.121	6.510	19.	1356.
CLEAR CREEK (WESTERN)	0.200	32.6	0.182	7.641	33.	1605.

COMPENDIUM OF NATIONAL EUTHOPHICATION SURVEY LAKES IN ILLINOIS

NAME - SHELBYVILLE RESERVOIR (EUTHOPHIC)
COUNTY - SHELBY, MOULTRIE
STORET NO. - 1739 WORKING PAPER NO. 315. NTIS ACCESSION NO. PB-252 086/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	2729.90	44.52	5.0	19.600	131.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
166.	424.	1.0	0.062	0.019	3.290	4.160

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 8/73) P	(8/ 9/73) P	(10/18/73) P
17.2	5.2 - 16.6 (2)			

SUMMARY OF PHYTOPLANKTON DATA

5/ 8/73 GENERA	COUNT	8/ 9/73 GENERA	COUNT	10/18/73 GENERA	COUNT
CENTRIC DIATOM	2476	ACHNANTHES	963	MELOSIRA	483
FLAGELLATES	2459	FLAGELLATES	935	FLAGELLATES	189
STEPHANODISCUS	1451	STEPHANODISCUS	767	APHANIZOMENON	141
MELOSIRA	1059	NITZSCHIA	460	STEPHANODISCUS	141
EUGLENA	256	CRYPTOMONAS	321	CRYPTOMONAS	106
OTHER	461	OTHER	1019	OTHER	378
TOTAL	8162	TOTAL	4465	TOTAL	1438

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	37115.	1380.	15.	145010.	183520.
NITROGEN	108350.	6630.	640.	3709835.	3825455.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	63255.	66.	4.12
NITROGEN	2982440.	22.	85.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
KASKASKIA RIVER	9.300	1310.5	0.373	6.914	69.	1405.
UNNAMED CREEK (A1)	0.200	32.9	0.123	5.370	25.	1013.
WILBORN CREEK	0.300	43.3	0.094	6.660	20.	1236.
WEST OKAW CREEK	2.900	442.9	0.134	7.285	25.	1397.
MARROWBONE CREEK	1.000	150.7	0.463	8.241	95.	1537.
ASA CREEK	0.200	35.2	1.420	9.245	145.	1372.
JONATHAN CREEK	0.900	146.9	0.211	7.269	41.	1368.
WHITLEY CREEK	0.800	118.9	0.270	7.082	33.	1335.
SAND CREEK	0.300	54.1	0.285	6.146	44.	1055.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ILLINOIS

NAME - SLOCUM LAKE (EUTROPHIC)
COUNTY - LAKE
STORET NO. - 1758 WORKING PAPER NO. 316. NTIS ACCESSION NO. PB-250 639/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	22.60	0.87	1.2	0.100	121.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
214.	650.	0.3	0.865	0.362	0.200	6.040

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 9/73) N	(8/ 7/73) N	(10/16/73) N
221.1	20.7			

SUMMARY OF PHYTOPLANKTON DATA

5/ 9/73 GENERA	COUNT	8/ 7/73 GENERA	COUNT	10/16/73 GENERA	COUNT
CYCLOTELLA	13153	APHANIZOMENON	28338	APHANIZOMENON	17189
MELOSIRA	2162	MELOSIRA	1449	MELOSIRA	1084
SCENEDESMUS	1802	STEPHANODISCUS	378	CYCLOTELLA	271
ANABAENA	1622	CYCLOTELLA	315	C[illegible]TERIUM	232
CRYPTOMONAS	1441	ANACYSTIS(MICROCYSTIS)	189	S[illegible]URA	116
OTHER	2883	OTHER	1258	OTHER	194
TOTAL	23063	TOTAL	31927	TOTAL	19086

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	5135.	**********	15.	4580.	9730.
NITROGEN	17810.	**********	480.	9345.	27635.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	3915.	60.	11.18
NITROGEN	18585.	33.	31.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BANGS CREEK	0.100	18.3	2.465	7.257	210.	387.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ILLINOIS

NAME - LAKE SPRINGFIELD (EUTROPHIC)
COUNTY - SANGAMON
STORET NO. - 1742 WORKING PAPER NO. 317. NTIS ACCESSION NO. PB-250 947/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	681.20	17.13	4.0	4.500	176.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
126.	364.	0.4	0.108	0.059	3.265	4.020

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 7/73) P	(8/ 9/73) P	(10/18/73) P
13.0	18.2			

SUMMARY OF PHYTOPLANKTON DATA

5/ 7/73 GENERA	COUNT	8/ 9/73 GENERA	COUNT	10/18/73 GENERA	COUNT
MELOSIRA	515	MELOSIRA	2179	MELOSIRA	2264
CRYPTOMONAS	325	STEPHANODISCUS	812	NITZSCHIA	906
FLAGELLATES	135	NITZSCHIA	209	STEPHANODISCUS	483
PENNATE DIATOMS	81	CRYPTOMONAS	93	KIRCHNERIELLA	453
DACTYLOCOCCOPSIS	54	FLAGELLATES	93	ANACYSTIS(MICROCYSTIS)	302
OTHER	109	OTHER	393	OTHER	1238
TOTAL	1219	TOTAL	3779	TOTAL	5646

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	8070.	••••••••••	••••••••••	21080.	29150.
NITROGEN	23190.	••••••••••	••••••••••	1071745.	1094935.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	21720.	25.	1.70
NITROGEN	718340.	34.	63.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SUGAR CREEK	1.100	165.5	0.484	7.139	41.	1465.
PANTHER CREEK	0.400	61.6	0.110	7.332	20.	1582.
LICK CREEK	2.100	326.3	0.197	7.343	28.	1635.
POLECAT CREEK	0.100	19.0	0.825	9.177	98.	1826.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ILLINOIS

NAME - LAKE STOREY (EUTROPHIC)
COUNTY - KNOX
STORET NO. - 1751 WORKING PAPER NO. 318. NTIS ACCESSION NO. PB-250 746/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	18.20	0.53	4.6	0.100	282.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
170.	410.	1.0	0.072	0.021	2.510	3.010

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/12/73) P	(8/ 9/73) P	(10/17/73) P
17.2	3.3			

SUMMARY OF PHYTOPLANKTON DATA

5/12/73 GENERA	COUNT	8/ 9/73 GENERA	COUNT	10/17/73 GENERA	COUNT
ASTERIONELLA	1491	COCCOID CELLS	360	APHANIZOMENON	2524
STEPHANODISCUS	983	OSCILLATORIA	206	COELASTRUM	677
MELOSIRA	813	COELASTRUM	129	ANABAENA	431
ANABAENA	576	OOCYSTIS	77	ANACYSTIS(MICROCYSTIS)	431
SYNEDRA	68	CRUCIGENIA	77	MELOSIRA	246
OTHER	168	OTHER	256	OTHER	801
TOTAL	4099	TOTAL	1105	TOTAL	5110

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	630.	**********	**********	525.	1155.
NITROGEN	1885.	**********	**********	21190.	23075.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	355.	69.	2.18
NITROGEN	16620.	28.	43.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UNNAMED CREEK (A2)	0.100	12.4	0.143	6.475	29.	1165.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ILLINOIS

NAME - LAKE VANDALIA (EUTROPHIC)
COUNTY - FAYETTE
STORET NO. - 1764 WORKING PAPER NO. 319, NTIS ACCESSION NO. PB-268 734/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	62.90	2.67	16.2	0.400	3.4

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
64.	174.	0.6	0.116	0.023	0.480	1.505

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/11/73) P	(8/10/73) P	(10/18/73) P
11.3	9.2			

SUMMARY OF PHYTOPLANKTON DATA

5/11/73 GENERA	COUNT	8/10/73 GENERA	COUNT	10/18/73 GENERA	COUNT
TRACHELOMONAS	133	COELOSPHAERIUM	712	ANACYSTIS(MICROCYSTIS)	974
CRYPTOMONAS	133	BLUE-GREEN FILAMENT	269	COELOSPHAERIUM	799
DACTYLOCOCCOPSIS	133	MELOSIRA	192	FLAGELLATES	174
FLAGELLATES	89	CYCLOTELLA	135	SCHROEDERIA	145
CYCLOTELLA	44	MERISMOPEDIA	116	CRYPTOMONAS	131
OTHER	44	OTHER	153	OTHER	568
TOTAL	576	TOTAL	1577	TOTAL	2791

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	90.	**********	5.	2475.	2570.
NITROGEN	270.	**********	265.	28960.	29495.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	2260.	12.	0.96
NITROGEN	27555.	7.	11.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BEAR CREEK	0.100	9.2	0.164	2.260	34.	430.
UNNAMED STREAM (B1)	0.100	13.3	0.169	2.550	36.	414.
UNNAMED STREAM (C1)	0.030	4.4	0.191	2.108	41.	391.
UNNAMED STREAM (D1)	0.020	3.1	0.313	3.042	58.	523.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ILLINOIS

NAME - LAKE VERMILION (EUTROPHIC)
COUNTY - VERMILION
STORET NO. - 1748 WORKING PAPER NO. 320. NTIS ACCESSION NO. PB-250 949/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	774.40	2.83	1.4	5.100	9.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
219.	530.	0.5	0.109	0.050	4.695	6.120

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/11/73) P	(8/ 8/73) P	(10/17/73) P
31.1	**********			

SUMMARY OF PHYTOPLANKTON DATA

5/11/73 GENERA	COUNT	8/ 8/73 GENERA	COUNT	10/17/73 GENERA	COUNT
MELOSIRA	534	CYCLOTELLA	776	STEPHANODISCUS	8643
SYNEDRA	276	MERISMOPEDIA	388	EUGLENA	1493
FLAGELLATES	129	BLUE-GREEN FILAMENT	259	CHLAMYDOMONAS	1257
CRYPTOMONAS	110	FLAGELLATES	216	CRYPTOMONAS	1110
EUGLENA	55	CRYPTOMONAS	216	CRUCIGENIA	1021
OTHER	258	OTHER	559	OTHER	5096
TOTAL	1362	TOTAL	2414	TOTAL	18620

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	8805.	**********	195.	19880.	28880.
NITROGEN	25510.	**********	7245.	1065350.	1098105.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	19430.	33.	10.20
NITROGEN	1020830.	7.	388.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
NORTH FK VERMILION RIVER	4.800	730.4	0.171	6.597	25.	1361.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ILLINOIS

NAME - LAKE WEE-MA-TUK (EUTROPHIC)
COUNTY - FULTON
STORET NO. - 1761 WORKING PAPER NO. 321. NTIS ACCESSION NO. PB-250 698/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	49.50	2.38	1.8	0.300	165.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
148.	881.	0.9	0.069	0.031	1.770	2.635

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/11/73) P	(8/ 9/73) P	(10/17/73) P
8.0	0.1			

SUMMARY OF PHYTOPLANKTON DATA

5/11/73 GENERA	COUNT	8/ 9/73 GENERA	COUNT	10/17/73 GENERA	COUNT
FLAGELLATES	3823	SPHAEROCYSTIS	1203	MELOSIRA	429
ASTERIONELLA	633	OSCILLATORIA	827	CYCLOTELLA	309
CRYPTOMONAS	407	COELASTRUM	802	OSCILLATORIA	245
CYCLOTELLA	204	CRUCIGENIA	251	CRYPTOMONAS	131
DINOBRYON	136	CYCLOTELLA	200	FLAGELLATES	90
OTHER	182	OTHER	425	OTHER	509
TOTAL	5385	TOTAL	3708	TOTAL	1713

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	135.	**********	**********	1305.	1440.
NITROGEN	410.	**********	**********	58045.	58455.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	670.	53.	0.61
NITROGEN	38190.	35.	24.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
PUT CREEK	0.100	18.3	0.131	6.425	27.	1178.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN ILLINOIS

NAME - WONDER LAKE (EUTROPHIC)
COUNTY - MCHENRY
STORET NO. - 1750 WORKING PAPER NO. 322. NTIS ACCESSION NO. PB-250 951/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	252.00	2.95	2.5	1.600	54.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
250.	560.	0.4	0.426	0.132	0.890	2.980

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
98.5	15.4	(5/ 9/73) P	(8/ 7/73) N	(10/16/73) N

SUMMARY OF PHYTOPLANKTON DATA

5/ 9/73 GENERA	COUNT	8/ 7/73 GENERA	COUNT	10/16/73 GENERA	COUNT
STEPHANODISCUS	979	MELOSIRA	3155	STEPHANODISCUS	4791
MELOSIRA	894	STEPHANODISCUS	947	CRYPTOMONAS	1060
CRYPTOMONAS	516	ANACYSTIS(MICROCYSTIS)	276	FLAGELLATES	424
SCENEDESMUS	285	EUGLENA	237	MELOSIRA	339
DINOBRYON	274	GLENODINIUM	237	SCHROEDERIA	229
OTHER	1356	OTHER	1459	OTHER	705
TOTAL	4304	TOTAL	6311	TOTAL	7548

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	25985.	**********	545.	10010.	36540.
NITROGEN	50435.	**********	20490.	173750.	244675.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	15980.	56.	12.39
NITROGEN	144795.	41.	82.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
NIPPERSINK CREEK	1.400	218.9	0.406	3.721	40.*	685.*

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN INDIANA

NAME - BASS LAKE (EUTROPHIC)
COUNTY - STARKE
STORET NO. - 1851 WORKING PAPER NO. 323, NTIS ACCESSION NO. PB-256 551/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	13.40	5.69	1.8	0.100	3.2

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
89.	216.	0.7	0.040	0.012	0.250	1.960

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 2/73) P	(8/ 3/73) P	(10/13/73) N
29.4	8.1			

SUMMARY OF PHYTOPLANKTON DATA

5/ 2/73 GENERA	COUNT	8/ 3/73 GENERA	COUNT	10/13/73 GENERA	COUNT
SCENEDESMUS	2063	LYNGBYA	6229	OSCILLATORIA	24890
LYNGBYA	1826	SYNEDRA	1126	LYNGBYA	9186
SYNEDRA	1420	BLUE-GREEN FILAMENT	1091	SYNEDRA	4004
FLAGELLATES	676	FLAGELLATES	528	ANABAENA	303
APHANOCAPSA	304	APHANOTHECE	353	CHROOCOCCUS	235
OTHER	2065	OTHER	2216	OTHER	1426
TOTAL	8354	TOTAL	11543	TOTAL	40044

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	115.	370.	485.
NITROGEN	**********	**********	4240.	14640.	18880.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	245.	49.	0.09
NITROGEN	10725.	43.	3.3

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN INDIANA

NAME - CATARACT LAKE (EUTROPHIC)
COUNTY - OWEN, PUTNAM
STORET NO. - 1805 WORKING PAPER NO. 324, NTIS ACCESSION NO. PB-256 604/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	762.00	5.66	6.1	7.970	50.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
139.	350.	0.8	0.058	0.013	1.660	2.455

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/10/73) P	(8/ 8/73) P	(10/10/73) P
10.7	1.2			

SUMMARY OF PHYTOPLANKTON DATA

5/10/73 GENERA	COUNT	8/ 8/73 GENERA	COUNT	10/10/73 GENERA	COUNT
CENTRIC DIATOM	8153	OSCILLATORIA	477	APHANIZOMENON	1957
FLAGELLATES	385	ANABAENA	477	OSCILLATORIA	814
ASTERIONELLA	256	MELOSIRA	382	ANABAENA	780
CRYPTOMONAS	183	APHANIZOMENON	223	FLAGELLATES	191
NITZSCHIA	92	FLAGELLATES	64	CYCLOTELLA	104
OTHER	91	OTHER	158	OTHER	190
TOTAL	9160	TOTAL	1781	TOTAL	4036

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	635.	**********	10.	31360.	32005.
NITROGEN	2390.	**********	425.	1033255.	1036070.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	18190.	43.	5.65
NITROGEN	766615.	26.	183.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
MILL CREEK	7.100	657.3	0.120	4.092	41.	1471.
DOE CREEK	0.300	34.4	0.345	4.296	83.	1175.
FERGUSON	0.110	24.9	0.259	3.215	36.	422.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN INDIANA

NAME - CROOKED LAKE (MESO-EUTROPHIC)
COUNTY - STEUBEN
STORET NO. - 1852 WORKING PAPER NO. 325. NTIS ACCESSION NO. PB-256 605/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	30.80	3.25	6.1	0.240	2.6

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
131.	648.	2.3	0.019	0.005	0.120	1.055

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 2/73) P	(8/ 4/73) P	(10/15/73) P
5.6	1.2			

SUMMARY OF PHYTOPLANKTON DATA

5/ 3/73 GENERA	COUNT	8/ 4/73 GENERA	COUNT	10/15/73 GENERA	COUNT
DINOBRYON	571	SYNEDRA	625	FLAGELLATES	882
BLUE-GREEN FILAMENT	376	APHANIZOMENON	509	CRYPTOMONAS	340
ASTERIONELLA	301	DINOBRYON	463	FRAGILARIA	139
MELOSIRA	286	ANACYSTIS(MICROCYSTIS)	463	MELOSIRA	93
FLAGELLATES	255	FRAGILARIA	440	SCHROEDERIA	62
OTHER	1051	OTHER	1505	OTHER	279
TOTAL	2840	TOTAL	4005	TOTAL	1795

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	50.	720.	770.
NITROGEN	**********	**********	3575.	17525.	21100.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	165.	79.	0.24
NITROGEN	9755.	54.	6.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
LOON LAKE OUTLET	0.100	6.3	0.027	1.178	8.	341.
CENTER LAKE OUTLET	0.100	7.8	0.167	2.163	49.	720.
UNNAMED STREAM (01)	0.100	5.3	0.070	1.538	21.	516.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN INDIANA

NAME - DALLAS LAKE (EUTROPHIC)
COUNTY - LAGRANGE
STORET NO. - 1845 WORKING PAPER NO. 326. NTIS ACCESSION NO. PB-256 606/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	103.10	1.14	10.8	1.000	148.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
197.	394.	2.2	0.029	0.014	0.830	1.485

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
10.1	3.7	(5/ 4/73) P	(8/ 3/73) P	(10/12/73) N

SUMMARY OF PHYTOPLANKTON DATA

5/ 4/73 GENERA	COUNT	8/ 3/73 GENERA	COUNT	10/12/73 GENERA	COUNT
FRAGILARIA	824	APHANIZOMENON	551	APHANIZOMENON	485
OSCILLATORIA	706	DICTYOSPHAERIUM	357	FLAGELLATES	414
ASTERIONELLA	426	OSCILLATORIA	298	CRYPTOMONAS	100
MELOSIRA	324	ANACYSTIS(MICROCYSTIS)	238	DINOBRYON	100
DINOBRYON	177	LYNGBYA	193	CHLAMYDOMONAS	100
OTHER	367	OTHER	714	OTHER	298
TOTAL	2824	TOTAL	2351	TOTAL	1497

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	285.	**********	10.	1445.	1740.
NITROGEN	1700.	**********	640.	69420.	71760.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1630.	6.	1.53
NITROGEN	48390.	33.	62.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
WESTLER LAKE OUTLET	0.900	97.9	0.048	2.266	14.	681.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN INDIANA

NAME - GEIST RESERVOIR (EUTROPHIC)
COUNTY - HAMILTON, MARION
STORET NO. - 1811 WORKING PAPER NO. 327. NTIS ACCESSION NO. PB-256 608/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	559.20	7.28	3.6	5.220	58.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
184.	458.	0.7	0.074	0.009	1.080	2.190

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/10/73) P	(8/ 2/73) P	(10/15/73) P
46.0	3.4			

SUMMARY OF PHYTOPLANKTON DATA

5/10/73 GENERA	COUNT	8/ 2/73 GENERA	COUNT	10/15/73 GENERA	COUNT
MELOSIRA	1803	CENTRIC DIATOM	11605	CENTRIC DIATOM	14908
CYCLOTELLA	1277	FLAGELLATES	9579	MELOSIRA	4820
DACTYLOCOCCOPSIS	992	MELOSIRA	6868	FLAGELLATES	3479
ASTERIONELLA	947	EUGLENA	468	OSCILLATORIA	2335
STEPHANODISCUS	841	SYNEDRA	426	MERISMOPEDIA	1888
OTHER	5438	OTHER	2884	OTHER	8251
TOTAL	11298	TOTAL	31830	TOTAL	35681

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	6195.	620.	55.	14075.	20945.
NITROGEN	18165.	**********	4190.	643225.	665580.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	12625.	40.	2.88
NITROGEN	681175.	LOSS	91.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
FALL CREEK	4.200	440.8	0.106	3.396	23.	1009.
DRY BRANCH	0.200	19.7	0.288	5.621	57.	1838.
FLATFORK CREEK	0.200	26.9	0.063	3.176	29.*	1689.*
THORPE CREEK	0.200	24.6	0.096	5.143	29.	1689.

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN INDIANA

NAME - HAMILTON LAKE (EUTROPHIC)
COUNTY - STEUBEN
STORET NO. - 1857 WORKING PAPER NO. 328, NTIS ACCESSION NO. PB-256 609/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	42.80	3.25	6.3	0.360	1.8

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
156.	343.	2.2	0.033	0.018	0.720	1.280

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 3/73) P	(8/ 4/73) N	(10/13/73) N
17.4	0.8			

SUMMARY OF PHYTOPLANKTON DATA

5/ 3/73 GENERA	COUNT	8/ 4/73 GENERA	COUNT	10/13/73 GENERA	COUNT
APHANIZOMENON	195	OSCILLATORIA	1187	LYNGBYA	244
MELOSIRA	114	COCCOID CELLS	890	FRAGILARIA	198
FLAGELLATES	114	MERISMOPEDIA	244	ANACYSTIS(MICROCYSTIS)	137
COCCOID CELLS	81	ANACYSTIS(MICROCYSTIS)	244	APHANIZOMENON	107
ASTERIONELLA	32	FRAGILARIA	192	CHROOCOCCUS	91
OTHER	48	OTHER	612	OTHER	305
TOTAL	584	TOTAL	3369	TOTAL	1082

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	55.	975.	1030.
NITROGEN	**********	**********	3955.	35105.	39060.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	540.	48.	0.32
NITROGEN	18455.	53.	12.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BLACK CREEK	0.220	24.1	0.087	3.109	26.	921.
UNNAMED CREEK (C1)	0.030	3.1	0.074	1.700	21.	550.
UNNAMED CREEK (D1)	0.030	3.6	0.052	1.567	15.	517.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN INDIANA

NAME - HOVEY LAKE (EUTROPHIC)
COUNTY - POSEY
STORET NO. - 1849 WORKING PAPER NO. 329. NTIS ACCESSION NO. PB-256 552/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	**********	0.98	1.2	**********	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
77.	300.	0.3	0.062	0.024	1.050	1.610

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
84.3	4.7	(5/11/73) P	(8/11/73) N	(10/19/73) N

SUMMARY OF PHYTOPLANKTON DATA

5/11/73 GENERA	COUNT	8/11/73 GENERA	COUNT	10/19/73 GENERA	COUNT
FLAGELLATES	8416	OSCILLATORIA	70272	RAPHIDIOPSIS	35107
ASTERIONELLA	226	PENNATE DIATOMS	27787	OSCILLATORIA	24575
DINOBRYON	181	ANABAENOPSIS	12685	STEPHANODISCUS	21064
LYNGBYA	181	CRYPTOMONAS	6846	PENNATE DIATOMS	18477
RAPHIDIOPSIS	136	MERISMOPEDIA	4632	MERISMOPEDIA	5543
OTHER	498	OTHER	32417	OTHER	27163
TOTAL	9638	TOTAL	154639	TOTAL	131929

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	**********	**********
NITROGEN	**********	**********	**********	**********	**********

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	**********
NITROGEN	**********	*****	**********

**** LAKE SAMPLING ONLY ****

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN INDIANA

NAME - JAMES LAKE (EUTROPHIC)
COUNTY - KOSCIUSKO
STORET NO. - 1817 WORKING PAPER NO. 330. NTIS ACCESSION NO. PB-261 774/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	144.80	1.14	8.2	1.360	80.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN L N(MG/L)
200.	388.	1.7	0.024	0.008	1.030	1.740

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 3/73) P	(8/ 4/73) P	(10/13/73) P
11.5	0.1			

SUMMARY OF PHYTOPLANKTON DATA

5/ 3/73 GENERA	COUNT	8/ 4/73 GENERA	COUNT	10/13/73 GENERA	COUNT
FLAGELLATES	3434	APHANIZOMENON	685	FLAGELLATES	984
ASTERIONELLA	753	ANACYSTIS(MICROCYSTIS)	597	LYNGBYA	414
DINOBRYON	663	SCENEDESMUS	544	DINOBRYON	259
CHROOCOCCUS	301	CYCLOTELLA	457	OSCILLATORIA	155
SYNEDRA	211	LYNGBYA	334	MELOSIRA	121
OTHER	662	OTHER	1702	OTHER	604
TOTAL	6024	TOTAL	4319	TOTAL	2537

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	••••••••••	••••••••••	5.	1480.	1485.
NITROGEN	••••••••••	••••••••••	250.	101135.	101385.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1535.	LOSS	1.30
NITROGEN	97490.	4.	88.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
TIPPECANOE RIVER	1.300	137.0	0.033	2.203	10.	683.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN INDIANA

NAME - JAMES LAKE (MESOTROPHIC)
COUNTY - STEUBEN
STORET NO. - 1853 WORKING PAPER NO. 331. NTIS ACCESSION NO. PB-256 610/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	123.80	4.18	7.3	1.130	312.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
142.	389.	3.7	0.016	0.005	0.190	0.830

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
4.9	0.1	(5/ 2/73) P	(8/ 4/73) P	(10/15/73) N

SUMMARY OF PHYTOPLANKTON DATA

5/ 2/73 GENERA	COUNT	8/ 4/73 GENERA	COUNT	10/15/73 GENERA	COUNT
ASTERIONELLA	496	FLAGELLATES	400	DINOBRYON	337
SCHROEDERIA	481	ANACYSTIS(MICROCYSTIS)	218	FLAGELLATES	258
FLAGELLATES	341	DINOBRYON	182	PENNATE DIATOMS	119
CRYPTOMONAS	186	MERISMOPEDIA	163	CRYPTOMONAS	99
FRAGILARIA	155	LYNGBYA	127	COELOSPHAERIUM	99
OTHER	233	OTHER	381	OTHER	219
TOTAL	1892	TOTAL	1471	TOTAL	1131

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	85.	1335.	1420.
NITROGEN	**********	**********	6195.	49995.	56190.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	590.	58.	0.34
NITROGEN	30490.	46.	13.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UNNAMED CREEK (B1)	0.040	4.1	0.022	1.513	7.	489.
UNNAMED CREEK (C1)	0.040	3.9	0.059	1.062	17.	321.
UNNAMED CREEK (D1)	1.000	104.1	0.035	1.211	10.	377.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN INDIANA

NAME - LONG LAKE (EUTROPHIC)
COUNTY - STEUBEN
STORET NO. - 1854 WORKING PAPER NO. 332. NTIS ACCESSION NO. PB-256 561/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	176.10	0.37	5.1	1.700	13.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
250.	613.	1.5	0.204	0.150	1.920	3.260

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
16.1	7.8	(5/ 2/73) P	(8/ 6/73) N	(10/13/73) N

SUMMARY OF PHYTOPLANKTON DATA

5/ 2/73 GENERA	COUNT	8/ 6/73 GENERA	COUNT	10/13/73 GENERA	COUNT
CRYPTOMONAS	1734	FRAGILARIA	2961	FLAGELLATES	159
DINOBRYON	1407	MELOSIRA	455	CRYPTOMONAS	63
MELOSIRA	854	BLUE-GREEN FILAMENT	253	MALLOMONAS	63
FLAGELLATES	427	CRYPTOMONAS	76	CERATIUM	48
ASTERIONELLA	301	SCHROEDERIA	76	COELASTRUM	32
OTHER	1182	OTHER	101	OTHER	79
TOTAL	5955	TOTAL	3922	TOTAL	444

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	2560.	**********	10.	8360.	10930.
NITROGEN	8915.	**********	790.	211080.	220785.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	7290.	33.	29.54
NITROGEN	199130.	10.	596.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
PIGEON CREEK	1.600	164.7	0.213	3.585	49.	1187.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN INDIANA

NAME - MARSH LAKE (EUTROPHIC)
COUNTY - STEUBEN
STORET NO. - 1856 WORKING PAPER NO. 333. NTIS ACCESSION NO. PB-256 626/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	38.60	0.23	6.1	0.360	45.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
270.	557.	1.2	0.093	0.055	0.270	1.190

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 3/73) N	(8/ 6/73) N	(10/15/73) N
34.5	**********			

SUMMARY OF PHYTOPLANKTON DATA

5/ 3/73 GENERA	COUNT	8/ 6/73 GENERA	COUNT	10/15/73 GENERA	COUNT
DINOBRYON	19189	GLOEOCYSTIS	124	FRAGILARIA	9824
FLAGELLATES	5586	OSCILLATORIA	74	APHANIZOMENON	1027
CRYPTOMONAS	811	MELOSIRA	74	CRYPTOMONAS	469
CYCLOTELLA	450	ANABAENA	50	OSCILLATORIA	67
RAPHIDIOPSIS	360	ANACYSTIS(MICROCYSTIS)	25	ANABAENA	22
OTHER	541	OTHER	50	OTHER	66
TOTAL	26937	TOTAL	397	TOTAL	11475

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	1120.	**********	**********	280.	1400.
NITROGEN	4380.	**********	**********	14870.	19250.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1310.	6.	6.09
NITROGEN	19705.	LOSS	83.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UNNAMED CREEK (R1)	0.200	21.0	0.161	2.509	7.*	455.
UNNAMED CREEK (C1)	0.050	5.4	0.025	0.976	7.	291.

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN INDIANA

NAME - LAKE MAXINKUCKEE (MESOTROPHIC)
COUNTY - MARSHALL
STORET NO. - 1843 WORKING PAPER NO. 335. NTIS ACCESSION NO. PB-256 632/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	35.50	7.54	7.3	0.300	6.7

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
146.	356.	2.5	0.020	0.003	0.220	0.720

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 2/73) P	(8/ 3/73) P	(10/13/73) N
5.5	0.1			

SUMMARY OF PHYTOPLANKTON DATA

5/ 2/73 GENERA	COUNT	8/ 3/73 GENERA	COUNT	10/13/73 GENERA	COUNT
FRAGILARIA	510	FLAGELLATES	340	LYNGBYA	3471
CYCLOTELLA	243	MELOSIRA	120	FRAGILARIA	131
GREEN FILAMENT	146	STEPHANODISCUS	120	GOMPHOSPHAERIA	109
FLAGELLATES	73	GOMPHOSPHAERIA	100	FLAGELLATES	109
MELOSIRA	49	SYNEDRA	80	ANACYSTIS(MICROCYSTIS)	87
OTHER	217	OTHER	295	OTHER	132
TOTAL	1238	TOTAL	1055	TOTAL	4039

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	40.	1115.	1155.
NITROGEN	**********	**********	3105.	39160.	42265.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	195.	83.	0.15
NITROGEN	8650.	80.	5.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
WILSON DITCH	0.100	5.7	0.059	3.455	18.	1054.
UNNAMED CREEK (B1)	0.100	6.5	0.163	4.731	48.	1448.
CURTISS DITCH	0.100	6.2	0.130	2.630	39.	807.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN INDIANA

NAME - MISSISSINEWA RESERVOIR (EUTROPHIC)
COUNTY - GRANT, MIAMI, WABASH
STORET NO. - 1827 WORKING PAPER NO. 334. NTIS ACCESSION NO. PB-256 627/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	2091.20	12.75	7.2	20.910	51.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
167.	474.	0.7	0.107	0.029	2.400	2.970

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 3/73) P	(8/ 3/73) P	(10/15/73) P
15.8	9.0			

SUMMARY OF PHYTOPLANKTON DATA

5/ 3/73 GENERA	COUNT	8/ 3/73 GENERA	COUNT	10/15/73 GENERA	COUNT
CRYPTOMONAS	664	STEPHANODISCUS	256	MELOSIRA	11168
FLAGELLATES	513	MELOSIRA	205	STEPHANODISCUS	685
CYCLOTELLA	468	SYNEDRA	102	ANKISTHODESMUS	304
ASTERIONELLA	332	OSCILLATORIA	85	EUGLENA	228
SYNEDRA	90	EUGLENA	34	CYCLOTELLA	228
OTHER	213	OTHER	121	OTHER	135
TOTAL	2280	TOTAL	803	TOTAL	12748

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	46785.	4155.	20.	111505.	162465.
NITROGEN	360155.	27170.	1190.	2879415.	3267930.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	81570.	50.	12.74
NITROGEN	2402895.	26.	256.3

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
MISSISSINEWA RIVER	18.440	1815.6	0.255	4.971	56.	1412.
GRANT CREEK	0.260	28.0	0.125	2.433	37.	748.
BADGER CREEK	0.070	7.8	0.172	5.226	51.	1599.
METOCINAH CREEK	0.360	38.8	0.105	2.616	31.	798.
HUMMEL CREEK	0.320	33.7	0.160	3.340	48.	1017.
CART CREEK	0.310	32.9	0.096	5.781	29.	1779.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN INDIANA

NAME - MONROE RESERVOIR (EUTROPHIC)
COUNTY - BROWN, MONROE
STORET NO. - 1828 WORKING PAPER NO. 336. NTIS ACCESSION NO. PB-256 616/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	1119.70	43.50	5.3	10.960	242.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
31.	131.	1.6	0.025	0.007	0.325	0.680

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
6.9	0.1 - 0.1 (2)	(5/10/73) P	(8/ 6/73) P	(10/10/73) P

SUMMARY OF PHYTOPLANKTON DATA

5/10/73 GENERA	COUNT	8/ 6/73 GENERA	COUNT	10/10/73 GENERA	COUNT
DINOBRYON	1092	FRAGILARIA	1424	ANACYSTIS(MICROCYSTIS)	289
FRAGILARIA	225	MELOSIRA	976	MELOSIRA	184
CRYPTOMONAS	203	APHANIZOMENON	165	ANABAENA	145
ASTERIONELLA	191	LYNGBYA	149	FLAGELLATES	132
FLAGELLATES	101	MERISMOPEDIA	99	DACTYLOCOCCOPSIS	132
OTHER	350	OTHER	494	OTHER	538
TOTAL	2162	TOTAL	3307	TOTAL	1420

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	2470.	**********	20.	9500.	11990.
NITROGEN	9420.	**********	1440.	380220.	391080.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	6695.	44.	0.28
NITROGEN	386755.	1.	9.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SOUTH FK.. SALT CREEK	2.520	265.2	0.034	0.940	10.	294.
MIDDLE FK.. SALT CREEK	1.770	187.0	0.026	0.889	8.	288.
GRAVEL CREEK	0.120	12.9	0.023	0.917	7.	221.
CROOKED CREEK	0.080	9.1	0.012	0.857	4.	268.
NORTH FK.. SALT CREEK	3.880	327.1	0.037	0.806	9.	335.
LOWER SCHOONER CREEK	0.290	31.1	0.027	0.782	8.	330.
BRUMMET CREEK	0.340	36.0	0.016	0.797	5.	238.
STEPHENS CREEK	0.360	38.6	0.014	1.279	4.	478.
MOORE CREEK	0.110	11.4	0.014	0.653	4.	241.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN INDIANA

NAME - MORSE RESERVOIR (EUTROPHIC)
COUNTY - HAMILTON
STORET NO. - 1829

WORKING PAPER NO. 337, NTIS ACCESSION NO. PB-256 560/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	555.30	5.57	4.7	5.400	56.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
175.	400.	0.7	0.084	0.009	3.325	4.855

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/10/73) P	(8/ 2/73) P	(10/15/73) P
56.2	2.5			

SUMMARY OF PHYTOPLANKTON DATA

5/10/73 GENERA	COUNT	8/ 2/73 GENERA	COUNT	10/15/73 GENERA	COUNT
MELOSIRA	7976	RAPHIDIOPSIS	56584	OSCILLATORIA	8377
STEPHANODISCUS	2705	OSCILLATORIA	27006	RAPHIDIOPSIS	3064
CHLAMYDOMONAS	1554	LYNGBYA	3429	STEPHANODISCUS	2298
DACTYLOCOCCOPSIS	863	ANACYSTIS(MICROCYSTIS)	3144	LYNGBYA	1484
CRYPTOMONAS	403	MERISMOPEDIA	2143	MERISMOPEDIA	1197
OTHER	3534	OTHER	5716	OTHER	5313
TOTAL	17035	TOTAL	98022	TOTAL	21733

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	11600.	**********	5.	24690.	36295.
NITROGEN	26670.	**********	225.	852045.	878940.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	17260.	52.	6.52
NITROGEN	786085.	11.	157.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CICERO CREEK	3.400	348.4	0.264	5.495	55.	1597.
HINKLE CREEK	0.600	52.1	0.070	4.029	25.	1326.
LITTLE CICERO CREEK	1.200	112.1	0.111	5.053	30.	1520.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN INDIANA

NAME - OLIN LAKE (MESOTROPHIC)
COUNTY - LAGRANGE
STORET NO. - 1846 WORKING PAPER NO. 338, NTIS ACCESSION NO. PB-254 050/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	15.00	0.42	11.7	0.140	1.1

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
190.	403.	2.5	0.012	0.003	1.460	1.775

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 4/73) P	(8/ 6/73) P	(10/11/73) P
4.9	0.1			

SUMMARY OF PHYTOPLANKTON DATA

5/ 4/73 GENERA	COUNT	8/ 6/73 GENERA	COUNT	10/11/73 GENERA	COUNT
FRAGILARIA	904	CYCLOTELLA	757	COCCOID CELLS	227
DINOBRYON	572	MELOSIRA	512	FLAGELLATES	178
ANABAENA	512	FLAGELLATES	220	COELOSPHAERIUM	69
ASTERIONELLA	301	APHANIZOMENON	195	APHANIZOMENON	59
MELOSIRA	256	ANACYSTIS(MICROCYSTIS)	146	CRYPTOMONAS	39
OTHER	859	OTHER	244	OTHER	60
TOTAL	3404	TOTAL	2074	TOTAL	632

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	340.	340.
NITROGEN	**********	**********	**********	14550.	14550.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	70.	79.	0.81
NITROGEN	9000.	38.	34.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
MARTIN LAKE OUTLET	0.120	12.7	0.077	3.243	23.	965.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN INDIANA

NAME - OLIVER LAKE (MESOTROPHIC)
COUNTY - LAGRANGE
STORET NO. - 1847 WORKING PAPER NO. 339, NTIS ACCESSION NO. PB-254 051/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	28.70	1.50	12.2	0.250	2.3

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
181.	355.	2.7	0.009	0.004	0.920	1.235

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 4/73) P	(8/ 6/73) P	(10/11/73) P
3.8	0.1			

SUMMARY OF PHYTOPLANKTON DATA

5/ 4/73 GENERA	COUNT	8/ 6/73 GENERA	COUNT	10/11/73 GENERA	COUNT
OOCYSTIS	616	STEPHANODISCUS	456	FRAGILARIA	53
MELOSIRA	590	FLAGELLATES	178	DINOBRYON	53
FRAGILARIA	402	OOCYSTIS	79	FLAGELLATES	53
DINOBRYON	289	PERIDINIUM	40	GOMPHOSPHAERIA	35
CYCLOTELLA	264	GOMPHOSPHAERIA	40	DINOFLAGELLATES	35
OTHER	615	OTHER	158	OTHER	158
TOTAL	2776	TOTAL	951	TOTAL	387

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	15.	225.	240.
NITROGEN	**********	**********	1095.	22405.	23500.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	110.	54.	0.16
NITROGEN	13155.	44.	15.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
DOVE CREEK	0.140	5.7	0.035	3.285	11.	966.
OLIN LAKE OUTLET	0.100	15.0	0.015	2.026	5.	600.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN INDIANA

NAME - PIGEON LAKE (EUTROPHIC)
COUNTY - STEUBEN
STORET NO. - 1855

WORKING PAPER NO. 340. NTIS ACCESSION NO. PB-256 628/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	82.90	0.25	4.6	0.760	17.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
258.	570.	1.5	0.058	0.015	1.945	3.600

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 3/73) P	(8/ 6/73) P	(10/15/73) P AND N
11.9	1.8			

SUMMARY OF PHYTOPLANKTON DATA

5/ 3/73 GENERA	COUNT	8/ 6/73 GENERA	COUNT	10/15/73 GENERA	COUNT
FLAGELLATES	859	MELOSIRA	3696	CRYPTOMONAS	1071
CRYPTOMONAS	186	CERATIUM	296	CYCLOTELLA	423
ASTERIONELLA	114	DINOBRYON	74	CHLORELLA	366
TRACHELOMONAS	57	APHANIZOMENON	55	DINOBRYON	338
GYMNODINIUM	14	CRYPTOMONAS	37	FRAGILARIA	268
OTHER	29	OTHER	74	OTHER	1196
TOTAL	1259	TOTAL	4232	TOTAL	3662

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	2080.	2080.
NITROGEN	**********	**********	**********	105980.	105980.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1660.	20.	8.32
NITROGEN	92695.	13.	423.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
PIGEON CREEK	0.510	54.6	0.078	3.301	23.	1189.
EWING DITCH	0.150	10.9	0.104	5.098	31.	1568.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN INDIANA

NAME - SYLVAN LAKE (EUTROPHIC)
COUNTY - NOBLE
STORET NO. - 1848 WORKING PAPER NO. 341. NTIS ACCESSION NO. PB-256 559/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	87.50	2.55	4.3	0.800	159.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
161.	542.	0.8	0.170	0.017	0.130	2.350

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/10/73) N	(8/ 3/73) N	(10/12/73) N
47.5	**********			

SUMMARY OF PHYTOPLANKTON DATA

5/10/73		8/ 3/73		10/12/73	
GENERA	COUNT	GENERA	COUNT	GENERA	COUNT
SCENEDESMUS	3258	OSCILLATORIA	5216	OSCILLATORIA	6612
CRYPTOMONAS	2984	APHANIZOMENON	1250	SCENEDESMUS	918
MELOSIRA	1887	ANABAENA	965	MELOSIRA	771
FLAGELLATES	1201	OOCYSTIS	607	OOCYSTIS	771
TETRASTRUM	961	CRYPTOMONAS	322	CRYPTOMONAS	441
OTHER	8336	OTHER	1750	OTHER	2205
TOTAL	18627	TOTAL	10110	TOTAL	11718

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	1325.	**********	100.	1800.	3225.
NITROGEN	11975.	**********	7600.	94205.	113780.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	3410.	LOSS	1.26
NITROGEN	67245.	41.	44.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
LATTA LAKE OUTLET	0.100	6.7	0.030	1.466	9.	547.
HENDERSON LAKE DITCH	0.500	51.5	0.165	3.735	23.	971.
OVIATT DITCH	0.200	17.1	0.067	4.437	20.	1605.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN INDIANA

NAME - LAKE TIPPECANOE (MESOTROPHIC)
COUNTY - KOSCIUSKO
STORET NO. - 1844 WORKING PAPER NO. 342. NTIS ACCESSION NO. PB-261 773/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	292.70	3.11	11.3	2.740	148.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
171.	412.	2.8	0.019	0.005	0.195	1.030

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 3/73) P	(8/ 4/73) P	(10/13/73) P
6.0	1.0			

SUMMARY OF PHYTO PLANKTON DATA

5/ 3/73 GENERA	COUNT	8/ 4/73 GENERA	COUNT	10/13/73 GENERA	COUNT
FRAGILARIA	627	CYCLOTELLA	1339	LYNGBYA	682
ASTERIONELLA	292	LYNGBYA	854	APHANIZOMENON	185
MELOSIRA	292	OSCILLATORIA	602	SCENEDESMUS	128
FLAGELLATES	292	ANACYSTIS(MICROCYSTIS)	427	DINOBRYON	85
CRYPTOMONAS	204	SYNEDRA	311	ACHNANTHES	85
OTHER	656	OTHER	1261	OTHER	440
TOTAL	2363	TOTAL	4794	TOTAL	1605

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	50.	3365.	3415.
NITROGEN	**********	**********	3805.	208515.	212320.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	2410.	29.	1.10
NITROGEN	171350.	19.	68.3

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
TIPPECANOE RIVER	1.370	144.8	0.044	2.050	11.	673.
GRASSY CREEK	1.270	134.2	0.041	2.388	12.	744.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN INDIANA

NAME - VERSAILLES LAKE (EUTROPHIC)
COUNTY - RIPLEY
STORET NO. - 1850 WORKING PAPER NO. 343. NTIS ACCESSION NO. PB-254 052/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	436.70	0.93	******	4.120	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
128.	315.	0.5	0.139	0.019	1.090	1.910

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/29/73) P	(8/ 2/73) P	(10/10/73) P
25.1	19.7			

SUMMARY OF PHYTOPLANKTON DATA

4/29/73 GENERA	COUNT	8/ 2/73 GENERA	COUNT	10/10/73 GENERA	COUNT
CRYPTOMONAS	1292	STEPHANODISCUS	4946	OSCILLATORIA	10228
OSCILLATORIA	775	CHROOMONAS	1371	MELOSIRA	3133
CENTRIC DIATOM	52	FLAGELLATES	979	CENTRIC DIATOM	2580
SYNEDRA	34	CHLOROGONIUM	539	MERISMOPEDIA	1843
NAVICULA	17	MELOSIRA	196	CRYPTOMONAS	1659
OTHER	0	OTHER	1763	OTHER	4607
TOTAL	2170	TOTAL	9794	TOTAL	24050

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	17720.	**********	**********	23590.	41310.
NITROGEN	14880.	**********	175.	321170.	336225.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	28700.	31.	44.42
NITROGEN	353070.	LOSS	361.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
LAUGHERY CREEK	3.780	396.5	0.338	2.545	58.	762.
FALLING CREEK	0.140	15.5	0.031	0.927	9.	309.
UNNAMED STREAM (C1)	0.070	7.8	0.086	1.490	25.	473.
CEDAR CREEK	0.110	11.9	0.080	1.336	24.	626.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN INDIANA

NAME - WAWASEE LAKE (MESOTROPHIC)
COUNTY - KOSCIUSKO
STORET NO. - 1836 WORKING PAPER NO. 344. NTIS ACCESSION NO. PB-254 053/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	94.20	12.38	6.7	0.800	3.5

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
126.	330.	3.4	0.012	0.003	0.210	1.010

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 3/73) P	(8/ 4/73) P	(10/15/73) P
5.0	0.1			

SUMMARY OF PHYTOPLANKTON DATA

5/ 3/73 GENERA	COUNT	8/ 4/73 GENERA	COUNT	10/15/73 GENERA	COUNT
OOCYSTIS	380	ANACYSTIS(MICROCYSTIS)	835	FLAGELLATES	407
CYCLOTELLA	371	GOMPHONEMA	519	MELOSIRA	319
MELOSIRA	361	MELOSIRA	230	FRAGILARIA	231
FLAGELLATES	361	CRYPTOMONAS	173	GOMPHOSPHAERIA	77
FRAGILARIA	234	CYCLOTELLA	115	ANACYSTIS(MICROCYSTIS)	77
OTHER	351	OTHER	318	OTHER	210
TOTAL	2058	TOTAL	2190	TOTAL	1321

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	125.	**********	135.	1110.	1370.
NITROGEN	745.	**********	10105.	97145.	107995.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	550.	60.	0.11
NITROGEN	41360.	62.	8.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
TURKEY CREEK	0.380	41.2	0.043	5.048	11.	999.
DILLON CREEK	0.050	5.7	0.037	3.285	12.	1425.
PAPAKEECHIE LAKE OUTLET	0.130	14.2	0.029	1.040	9.	351.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN INDIANA

NAME - WEBSTER LAKE (EUTROPHIC)
COUNTY - KOSCIUSKO
STORET NO. - 1837 WORKING PAPER NO. 345. NTIS ACCESSION NO. PB-256 558/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	126.70	2.37	2.1	1.200	49.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
196.	412.	1.8	0.025	0.005	0.790	1.590

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 2/73) P	(8/ 4/73) P	(10/15/73) P
11.5	0.1			

SUMMARY OF PHYTOPLANKTON DATA

5/ 2/73 GENERA	COUNT	8/ 4/73 GENERA	COUNT	10/15/73 GENERA	COUNT
SYNEDRA	2553	ANACYSTIS(MICROCYSTIS)	6999	ANACYSTIS(MICROCYSTIS)	1799
CRYPTOMONAS	1343	FRAGILARIA	986	SYNEDRA	642
ASTERIONELLA	381	CYCLOTELLA	789	COSMARIUM	492
MELOSIRA	336	SCENEDESMUS	740	DICTYOSPHAERIUM	471
DINOBRYON	224	SYNEDRA	641	CYCLOTELLA	428
OTHER	380	OTHER	3843	OTHER	2485
TOTAL	5217	TOTAL	13998	TOTAL	6317

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	240.	**********	40.	2195.	2475.
NITROGEN	1445.	**********	3145.	119115.	123705.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1250.	49.	1.04
NITROGEN	94115.	24.	52.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
TIPPECANOE RIVER	1.100	114.5	0.079	2.896	17.	938.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN INDIANA

NAME - WESTLER LAKE (EUTROPHIC)
COUNTY - LAGRANGE
STORET NO. - 1841 WORKING PAPER NO. 346. NTIS ACCESSION NO. PB-256 630/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	97.90	0.36	6.1	0.900	27.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
206.	455.	1.8	0.035	0.013	0.860	1.700

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
10.7	0.8	(5/ 3/73) P	(8/ 3/73) P	(10/12/73) N

SUMMARY OF PHYTOPLANKTON DATA

5/ 3/73 GENERA	COUNT	8/ 3/73 GENERA	COUNT	10/12/73 GENERA	COUNT
FRAGILARIA	2069	OSCILLATORIA	663	APHANIZOMENON	715
ASTERIONELLA	943	GOMPHOSPHAERIA	186	OSCILLATORIA	345
FLAGELLATES	318	APHANIZOMENON	176	FLAGELLATES	222
APHANIZOMENON	196	FLAGELLATES	133	FRAGILARIA	99
OSCILLATORIA	147	ANACYSTIS(MICROCYSTIS)	53	ANABAENA	74
OTHER	233	OTHER	35	OTHER	247
TOTAL	3906	TOTAL	1246	TOTAL	1702

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	20.	1560.	1580.
NITROGEN	**********	**********	1490.	55645.	57135.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1400.	11.	4.39
NITROGEN	66625.	LOSS	158.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
WITMER LAKE OUTLET	0.900	93.5	0.053	1.921	16.	575.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN INDIANA

NAME - WHITEWATER LAKE (EUTROPHIC)
COUNTY - UNION
STORET NO. - 1839 WORKING PAPER NO. 347, NTIS ACCESSION NO. PB-256 629/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	49.80	0.81	4.6	0.460	94.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
156.	400.	0.8	0.084	0.012	1.620	3.025

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/29/73) P	(8/ 2/73) P	(10/10/73) P
33.1	**********			

SUMMARY OF PHYTOPLANKTON DATA

4/29/73 GENERA	COUNT	8/ 2/73 GENERA	COUNT	10/10/73 GENERA	COUNT
FLAGELLATES	14936	OSCILLATORIA	14849	CHRYSOPHYTAN CELLS	24194
MELOSIRA	13553	SYNEDRA	2787	OSCILLATORIA	13483
CENTRIC DIATOM	691	DACTYLOCOCCOPSIS	2110	DACTYLOCOCCOPSIS	11341
CRYPTOMONAS	507	ANACYSTIS(MICROCYSTIS)	876	FLAGELLATES	8947
EUGLENA	138	STEPHANODISCUS	557	ANACYSTIS(MICROCYSTIS)	6930
OTHER	140	OTHER	915	OTHER	21807
TOTAL	29965	TOTAL	22094	TOTAL	86702

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	625.	**********	5.	2025.	2655.
NITROGEN	3465.	**********	35.	68645.	72145.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	960.	64.	3.28
NITROGEN	54900.	24.	89.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SILVER CREEK	0.390	41.7	0.201	5.106	45.	1543.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN INDIANA

NAME - WINONA LAKE (EUTROPHIC)
COUNTY - KOSCIUSKO
STORET NO. - 1840 WORKING PAPER NO. 348. NTIS ACCESSION NO. PB-256 557/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	83.10	2.27	9.1	0.800	319.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
184.	461.	1.4	0.035	0.011	1.250	2.020

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 4/73) P	(8/ 4/73) P	(10/13/73) N
11.2	2.3			

SUMMARY OF PHYTOPLANKTON DATA

5/ 4/73 GENERA	COUNT	8/ 4/73 GENERA	COUNT	10/13/73 GENERA	COUNT
FLAGELLATES	975	APHANIZOMENON	4459	OSCILLATORIA	3942
MELOSIRA	326	LYNGBYA	4144	ACHNANTHES	1099
COCCOID CELLS	274	ACHNANTHES	3108	COCCOID CELLS	1084
ASTERIONELLA	222	SYNEDRA	1982	DACTYLOCOCCOPSIS	848
APHANIZOMENON	171	DACTYLOCOCCOPSIS	766	LYNGBYA	597
OTHER	616	OTHER	2251	OTHER	1051
TOTAL	2584	TOTAL	16710	TOTAL	8621

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	15.	1790.	1805.
NITROGEN	**********	**********	1280.	88965.	90245.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	945.	48.	0.80
NITROGEN	69525.	23.	39.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
PETERSON DITCH	0.300	30.0	0.073	2.781	22.	916.
KEEFER-EVANS DITCH	0.100	11.1	0.054	2.928	16.	973.
WYLAND DITCH	0.300	36.0	0.079	3.801	23.	1243.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN INDIANA

NAME - WITMER LAKE (EUTROPHIC)
COUNTY - LAGRANGE
STORET NO. - 1842 WORKING PAPER NO. 349. NTIS ACCESSION NO. PB-256 602/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	93.50	0.83	10.4	0.900	115.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
216.	399.	1.5	0.035	0.011	0.900	1.810

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
11.9	5.2	(5/ 3/73) P	(8/ 3/73) N	(10/12/73) N

SUMMARY OF PHYTOPLANKTON DATA

8/ 3/73 GENERA	COUNT	10/12/73 GENERA	COUNT
APHANIZOMENON	522	APHANIZOMENON	882
OSCILLATORIA	197	OSCILLATORIA	463
TABELLARIA	169	FLAGELLATES	433
GOMPHOSPHAERIA	169	LYNGBYA	374
OOCYSTIS	85	CRYPTOMONAS	120
OTHER	240	OTHER	313
TOTAL	1382	TOTAL	2585

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	190.	**********	15.	2065.	2270.
NITROGEN	760.	**********	1170.	64180.	66110.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1530.	33.	2.73
NITROGEN	53730.	19.	79.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
LITTLE ELKHART CREEK	0.800	82.1	0.088	2.392	24.	722.
UNNAMED STREAM (C1)	0.030	3.4	0.022	1.279	6.	381.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN KENTUCKY

NAME - BARREN RIVER RESERVOIR (EUTROPHIC)
COUNTY - ALLEN, BARREN
STORET NO. - 2105 WORKING PAPER NO. 350. NTIS ACCESSION NO. PB- /AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	2434.60	40.47	5.8	33.420	80.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
83.	195.	1.2	0.027	0.006	0.460	0.890

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/18/73) P	(8/11/73) P	(10/23/73) P
8.2	0.1 - 15.8 (3)			

SUMMARY OF PHYTOPLANKTON DATA

5/18/73 GENERA	COUNT	8/11/73 GENERA	COUNT	10/23/73 GENERA	COUNT
FLAGELLATES	4402	RAPHIDIOPSIS	9775	MELOSIRA	1149
STEPHANODISCUS	2105	LYNGBYA	1777	FLAGELLATES	938
MELOSIRA	2074	ACHNANTHES	1333	CYCLOTELLA	181
NITZSCHIA	638	FLAGELLATES	889	DACTYLOCOCCOPSIS	181
DINOBRYON	383	CYCLOTELLA	207	RAPHIDIOPSIS	151
OTHER	861	OTHER	563	OTHER	772
TOTAL	10463	TOTAL	14544	TOTAL	3372

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	26920.	**********	20.	50150.	77090.
NITROGEN	67295.	**********	695.	1691715.	1759705.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	50720.	34.	1.90
NITROGEN	1472500.	16.	43.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BARREN RIVER	14.080	997.1	0.041	1.489	15.	664.
BEAVER CREEK	2.430	177.4	0.044	2.053	19.	894.
SOUTH FORK (B2)	0.670	50.0	1.921	5.904	333.	1192.
SKAGGS CREEK	5.070	365.2	0.025	1.657	11.	733.
GLOVER CREEK	0.370	27.7	0.035	1.019	15.	430.
TRACE CREEK	0.180	13.3	0.031	1.200	13.	501.
RHODEN CREEK	0.340	25.8	0.031	1.082	13.	457.
LONG CREEK	2.490	181.3	0.024	1.461	11.	638.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN KENTUCKY

NAME - CUMBERLAND LAKE (MESOTROPHIC)
COUNTY - CLINTON, PULASKI, RUSSELL, WAYNE
STORET NO. - 2101 WORKING PAPER NO. 351, NTIS ACCESSION NO. PB-278 525/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	14993.50	203.36	24.2	252.840	226.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
37.	130.	1.7	0.016	0.007	0.330	0.550

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/29/73) P	(8/21/73) P	(10/25/73) P
3.8	0.1 - 0.1 (2)			

SUMMARY OF PHYTOPLANKTON DATA

5/29/73 GENERA	COUNT	8/21/73 GENERA	COUNT	10/25/73 GENERA	COUNT
FLAGELLATES	447	ANOMOEONEIS	5132	ANOMOEONEIS	628
FRAGILARIA	394	FLAGELLATES	572	FLAGELLATES	107
DINOBRYON	105	COSMARIUM	248	SYNEDRA	107
CRYPTOMONAS	79	CYCLOTELLA	133	FRAGILARIA	92
STEPHANODISCUS	66	FRAGILARIA	57	CYCLOTELLA	61
OTHER	79	OTHER	173	OTHER	154
TOTAL	1170	TOTAL	6315	TOTAL	1149

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	19230.	**********	20.	378520.	397770.
NITROGEN	36675.	**********	780.	10007040.	10044495.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	243735.	39.	1.96
NITROGEN	7234410.	28.	49.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CUMBERLAND RIVER	89.470	5180.0	0.070	1.322	38.	724.
INDIAN CREEK	0.300	22.5	0.025	1.670	10.	697.
WILLIAMS CREEK	0.280	21.0	0.021	1.554	9.	646.
OTTER CREEK	2.390	174.3	0.014	0.969	6.	420.
BEAVER CREEK	3.280	238.3	0.210	1.901	71.	783.
MEADOW CREEK	0.640	48.2	0.038	1.326	16.	563.
LILY CREEK	0.350	26.4	0.229	1.543	24.	434.
HORSE CREEK	0.570	43.0	0.025	1.205	10.	508.
WOLF CREEK	0.570	43.0	0.020	1.223	9.	465.
WHITE OAK CREEK	0.800	59.3	0.021	1.150	9.	487.
FISHING CREEK ARM	5.070	365.2	0.031	1.282	13.	563.
SINKING CREEK (MI)	0.560	42.2	0.379	2.927	13.*	538.*
PITMAN CREEK	2.940	192.2	0.045	1.415	22.	686.

BUCK CREEK	11.730	758.9	0.032	1.098	16.	538.
ROCKCASTLE CREEK	30.880	1921.8	0.042	2.380	21.	1207.
LAUREL RIVER	11.480	733.0	0.057	1.652	24.	783.
BEAVER CREEK (S1)	0.750	55.7	0.009	0.607	4.	257.
SOUTH FORK CUMBERLAND R.	55.070	2805.0	0.030	0.567	18.	353.
LITTLE S FORK CUMBERLAND	4.260	308.2	0.018	0.753	8.	225.
SINKING CREEK (V1)	1.510	111.4	0.019	0.465	8.	203.

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN KENTUCKY

NAME - DALE HOLLOW RESERVOIR (OLIGO-MESOTROPHIC)
COUNTY - CLINTON, CUMBERLAND, KY; CLAY, OVERTON, PICKETT, TN
STORET NO. - 2102 WORKING PAPER NO. 352, NTIS ACCESSION NO. PB-279 106/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	2424.20	108.62	14.4	42.630	1.2

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
63.	180.	4.3	0.010	0.005	0.270	0.490

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/18/73) P	(8/18/73) P	(10/24/73) P
3.6	0.1 - 0.1 (2)			

SUMMARY OF PHYTOPLANKTON DATA

5/18/73 GENERA	COUNT	8/18/73 GENERA	COUNT	10/24/73 GENERA	COUNT
FLAGELLATES	112	ANOMOEONEIS	817	FLAGELLATES	447
DINOBRYON	73	CYCLOTELLA	83	SYNEDRA	49
ASTERIONELLA	15	FLAGELLATES	71	ANOMOEONEIS	49
CYCLOTELLA	10	DINOFLAGELLATES	71	SPHERICAL CELLS	49
FRAGILARIA	5	ASTERIONELLA	59	ACHNANTHES	26
OTHER	66	OTHER	189	OTHER	38
TOTAL	281	TOTAL	1290	TOTAL	658

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	13940.	**********	10.	24245.	38195.
NITROGEN	25115.	**********	310.	1281350.	1306775.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	13085.	66.	0.35
NITROGEN	2585010.	LOSS	12.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SPRING CREEK	2.740	154.6	0.177	1.396	21.	661.
SULPHUR CREEK	0.410	22.4	0.015	0.881	9.	508.
ILLWILL CREEK	2.430	133.4	0.011	1.342	6.	774.
WOLF RIVER	13.710	751.1	0.023	0.761	13.	440.
EAST FORK, OBEY RIVER	10.900	523.2	0.014	0.875	5.	569.
BIG INDIAN CREEK	0.730	35.0	0.012	0.658	8.	433.
POPLAR COVE CREEK	0.950	48.7	0.011	1.203	7.	744.
WEST FORK, OBEY RIVER	5.860	388.5	0.013	0.674	6.	324.
BIG EAGLE CREEK	1.740	117.6	0.016	1.180	7.	557.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN KENTUCKY

NAME - HERRINGTON LAKE (EUTROPHIC)
COUNTY - BOYLE, GARRARD, MERCER
STORET NO. - 2103 WORKING PAPER NO. 353, NTIS ACCESSION NO. PB-272 234/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	1137.00	11.90	23.9	16.780	196.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
102.	242.	1.5	0.079	0.047	0.550	1.060

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
14.9	8.1	(5/26/73) P	(8/20/73) N	(10/25/73) N

SUMMARY OF PHYTOPLANKTON DATA

5/26/73 GENERA	COUNT	8/20/73 GENERA	COUNT	10/25/73 GENERA	COUNT
FLAGELLATES	4970	RAPHIDIOPSIS	1711	FLAGELLATES	7501
FRAGILARIA	4970	FLAGELLATES	1498	MELOSIRA	1162
SCENEDESMUS	155	STEPHANODISCUS	642	STEPHANODISCUS	563
STEPHANODISCUS	133	OSCILLATORIA	585	CYCLOTELLA	246
ASTERIONELLA	89	SYNEDRA	313	MERISMOPEDIA	211
OTHER	289	OTHER	768	OTHER	741
TOTAL	10606	TOTAL	5517	TOTAL	10424

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	29310.	**********	155.	80470.	109935.
NITROGEN	61580.	**********	5745.	1096395.	1163720.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	51955.	53.	9.24
NITROGEN	1565170.	LOSS	97.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
DIX RIVER	12.150	823.6	0.125	1.951	40.	874.
CLARKS RUN	0.980	73.0	1.491	5.092	424.	1666.
MOCKS BRANCH	0.560	42.5	0.385	3.965	155.	1647.
SPEARS CREEK	0.260	19.8	9.327	2.912	129.	1186.
CANE RUN	0.330	25.3	0.338	2.888	73.	1022.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN KENTUCKY

NAME - KENTUCKY LAKE (EUTROPHIC)
COUNTY - CALLOWAY, TRIGG, ET AL. KY; HARDIN, DECATUR, ET AL. TN
STORET NO. - 2104 WORKING PAPER NO. 354, NTIS ACCESSION NO. PB-265 581/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	104117.90	648.71	5.2	1793.400	22.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
57.	144.	1.0	0.081	0.030	0.395	0.680

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
8.1	5.4 - 8.4 (5)	(5/15/73) P	(8/13/73) N	(10/20/73) N

SUMMARY OF PHYTOPLANKTON DATA

5/15/73 GENERA	COUNT	8/13/73 GENERA	COUNT	10/20/73 GENERA	COUNT
MELOSIRA	2988	MELOSIRA	2033	OSCILLATORIA	2943
FLAGELLATES	1754	FLAGELLATES	913	MELOSIRA	1237
STEPHANODISCUS	350	OSCILLATORIA	884	FLAGELLATES	853
PENNATE DIATOMS	83	LYNGBYA	766	NITZSCHIA	853
NITZSCHIA	59	STEPHANODISCUS	295	ANABAENA	640
MALLOMONAS	56				
OTHER	197	OTHER	1090	OTHER	1238
TOTAL	5487	TOTAL	5981	TOTAL	7764

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	39835.	**********	300.	4557195.	4597330.
NITROGEN	101275.	**********	11255.	73212280.	73324810.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	5228730.	LOSS	7.09
NITROGEN	71210420.	3.	113.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
JONATHAN CREEK	2.520	172.5	0.082	0.802	38.	372.
LEDBETTER CREEK	0.130	9.2	0.025	1.304	11.	608.
BLOOD RIVER	4.930	336.7	0.130	1.630	61.	758.
EAGLE CREEK	0.470	32.4	0.042	0.544	20.	253.
WEST SANDY CREEK	5.720	391.1	0.119	0.977	17.	354.
BIG SANDY RIVER	23.840	1629.1	0.102	1.077	46.	499.
CROOKED CREEK	0.530	36.5	0.010	0.508	4.	236.
LITTLE SULPHUR CREEK	0.430	29.3	0.008	0.598	4.	124.
HARMON CREEK	0.670	45.6	0.009	0.818	4.	380.
BEAVERDAM CREEK	0.280	19.3	0.010	0.565	5.	263.
BURNSIDE CREEK	0.220	15.2	0.020	0.800	9.	371.
CYPRESS CREEK	2.850	194.5	0.447	1.675	135.	585.

TENNESSEE RIVER	1731.100	99116.6	0.090	1.282	44.	713.
TRACE CREEK	1.450	99.2	0.153	0.909	36.	376.
LITTLE RICHLAND CREEK	0.680	46.6	0.015	0.642	7.	296.
BIG RICHLAND CREEK	2.880	197.1	0.013	0.634	6.	292.
WHITEOAK CREEK	4.240	290.1	0.017	0.642	8.	217.
CANE CREEK	0.330	22.3	0.019	0.580	9.	267.
HURRICANE CREEK	0.970	66.0	0.018	0.551	3.	238.
LEATHERWOOD CREEK	1.110	75.6	0.012	0.869	6.	401.
STANDING ROCK CREEK	1.080	74.1	0.023	1.173	10.	542.
SULFUR CREEK	0.150	10.1	0.008	0.271	4.	284.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN MARYLAND

NAME - DEEP CREEK LAKE (MESOTROPHIC)
COUNTY - GARRETT
STORET NO. - 2402 WORKING PAPER NO. 355. NTIS ACCESSION NO. PB-245 846/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	167.60	15.78	8.1	3.600	1.1

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
10.	56.	3.0	0.011	0.005	0.450	0.625

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/21/73) P	(7/23/73) P	(10/ 4/73) P
6.1	0.2			

SUMMARY OF PHYTOPLANKTON DATA

4/21/73 GENERA	COUNT	7/28/73 GENERA	COUNT	10/ 4/73 GENERA	COUNT
FLAGELLATES	334	CHRYSOCAPSA	686	TABELLARIA	821
DINOBRYON	167	DINOBRYON	591	DINOBRYON	692
ASTERIONELLA	128	FLAGELLATES	528	FLAGELLATES	315
CRYPTOMONAS	128	STEPHANODISCUS	169	MELOSIRA	231
ANKISTRODESMUS	69	MELOSIRA	137	SYNURA	147
OTHER	107	OTHER	370	OTHER	203
TOTAL	933	TOTAL	2481	TOTAL	2409

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	255.	2580.	2835.
NITROGEN	**********	**********	9590.	123545.	133135.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	890.	69.	0.18
NITROGEN	68105.	49.	8.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CHERRY CREEK	0.490	32.1	0.012	0.559	6.	289.
MEADOW MTN RUN	0.190	7.8	0.014	0.764	12.	604.
N. GLADE RUN	0.130	10.3	0.031	1.414	13.	602.
PAWN RUN	0.160	5.6	0.048	1.984	46.	1904.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN MARYLAND

NAME - JOHNSON POND (EUTROPHIC)
COUNTY - WICOMICO
STORET NO. - 2409 WORKING PAPER NO. 356. NTIS ACCESSION NO. PB-246 633/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	96.10	0.42	2.1	1.900	5.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
12.	85.	1.1	0.098	0.040	0.950	1.700

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/10/73) P	(7/20/73) P	(9/28/73) P
26.2	10.7			

SUMMARY OF PHYTOPLANKTON DATA

4/10/73 GENERA	COUNT	7/20/73 GENERA	COUNT	9/28/73 GENERA	COUNT
FLAGELLATES	403	FLAGELLATES	683	FLAGELLATES	2168
FRAGILARIA	77	ANACYSTIS(MICROCYSTIS)	518	CRYPTOMONAS	1174
MELOSIRA	76	PHORMIDIUM	448	MELOSIRA	569
SYNEDRA	38	OSCILLATORIA	424	ANACYSTIS(MICROCYSTIS)	178
SCENEDESMUS	19	ANKISTRODESMUS	377	PHORMIDIUM	178
OTHER	114	OTHER	2257	OTHER	286
TOTAL	727	TOTAL	4707	TOTAL	4553

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	1630.	915.	5.	6190.	8740.
NITROGEN	4340.	3105.	10.	137525.	144980.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	7385.	16.	20.81
NITROGEN	161405.	LOSS	345.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
WICOMICO RIVER	1.400	67.9	0.155	2.867	77.	1665.
BREWINGTON RIVER	0.100	10.4	0.160	1.838	34.	425.
MIDDLE NECK BRANCH	0.300	14.6	0.161	2.235	14.	957.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN MARYLAND

NAME - LIBERTY RESERVOIR (MESOTROPHIC)
COUNTY - CARROLL, BALTIMORE
STORET NO. - 2403 WORKING PAPER NO. 357. NTIS ACCESSION NO. PB-245 773/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	424.80	12.59	13.0	4.900	413.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
26.	104.	2.5	0.018	0.006	1.760	2.200

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/11/73) P	(7/20/73) P	(10/ 1/73) P
6.3	2.2			

SUMMARY OF PHYTOPLANKTON DATA

4/11/73 GENERA	COUNT	7/20/73 GENERA	COUNT	10/ 1/73 GENERA	COUNT
FLAGELLATES	765	FRAGILARIA	1643	BLUE-GREEN FILAMENT	1421
MELOSIRA	325	MELOSIRA	810	FRAGILARIA	863
CRYPTOMONAS	314	SYNEDRA	476	CYCLOTELLA	360
ASTERIONELLA	42	CRYPTOMONAS	143	MELOSIRA	342
NAVICULA	31	STEPHANODISCUS	119	CRYPTOMONAS	198
OTHER	51	OTHER	240	OTHER	660
TOTAL	1528	TOTAL	3431	TOTAL	3844

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	145.	35.	5.	4510.	4695.
NITROGEN	370.	17695.	10.	407305.	425380.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	2215.	53.	0.37
NITROGEN	232840.	45.	33.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
N. BR. PATAPSCO RIVER	1.700	146.6	0.042	2.842	15.	1020.
LITTLE MORGAN RUN	0.300	22.5	0.026	2.551	10.	918.
MORGAN RUN	0.800	75.4	0.017	2.463	6.	854.
MIDDLE RUN	0.300	21.9	0.020	2.765	8.	1085.
BEAVER RUN	0.400	37.6	0.024	2.908	9.	1047.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN MARYLAND

NAME - LOCH RAVEN RESERVOIR (EUTROPHIC)
COUNTY - BALTIMORE
STORET NO. - 2408 WORKING PAPER NO. 358. NTIS ACCESSION NO. PB-245 845/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	791.60	7.67	15.2	9.000	146.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
41.	136.	1.8	0.023	0.007	1.440	1.800

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
7.1	1.0	(4/11/73) P	(7/21/73) P	(10/ 1/73) P

SUMMARY OF PHYTOPLANKTON DATA

4/11/73 GENERA	COUNT	7/21/73 GENERA	COUNT	10/ 1/73 GENERA	COUNT
FLAGELLATES	712	FRAGILARIA	3659	FRAGILARIA	1198
FRAGILARIA	597	CYCLOTELLA	570	MELOSIRA	480
ASTERIONELLA	394	MELOSIRA	480	FLAGELLATES	189
CRYPTOMONAS	140	FLAGELLATES	210	COELOSPHAERIUM	103
OSCILLATORIA	63	OOCYSTIS	180	STEPHANODISCUS	69
OTHER	204	OTHER	239	OTHER	240
TOTAL	2110	TOTAL	5338	TOTAL	2279

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	3155.	30.	**********	7935.	11120.
NITROGEN	4300.	370.	**********	621175.	625845.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	7775.	30.	1.45
NITROGEN	436650.	30.	81.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
GUNPOWDER FALLS RIVER	5.530	466.2	0.024	2.156	9.	774.
BEAVERDAM RUN	0.650	54.4	0.016	2.115	6.	764.
WESTERN RUN	1.760	163.7	0.040	2.214	11.	759.
GREEN BRANCH	0.160	11.9	0.018	2.349	8.	1018.
DULANEY VALLY BRANCH	0.130	8.3	0.019	1.424	48.	1610.
FITZHUGH RUN	0.070	4.1	0.092	3.175	13.	1212.
UNNAMED STREAM (H1)	0.040	3.6	0.026	2.385	10.	842.
SPRING BRANCH	0.040	4.5	0.027	2.342	6.	533.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN MISSISSIPPI

NAME - ARKABUTLA RESERVOIR (EUTROPHIC)
COUNTY - DESOTO, TATE
STORET NO. - 2801 WORKING PAPER NO. 359, NTIS ACCESSION NO. PB-252 045/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	2590.00	48.04	9.1	46.800	108.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
19.	59.	0.4	0.198	0.025	0.440	1.040

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(6/13/73) P	(8/28/73) P	(11/ 1/73) P
6.5	**********			

SUMMARY OF PHYTOPLANKTON DATA

6/13/73 GENERA	COUNT	8/28/73 GENERA	COUNT	11/ 1/73 GENERA	COUNT
MELOSIRA	276	MELOSIRA	709	DACTYLOCOCCOPSIS	152
BLUE-GREEN FILAMENT	232	TRACHELOMONAS	126	MALLOMONAS	84
EUGLENA	116	CRYPTOMONAS	76	CRYPTOMONAS	84
FLAGELLATES	102	GYMNODINIUM	76	MELOSIRA	67
TRACHELOMONAS	58	CYCLOTELLA	76	CENTRIC DIATOM	67
OTHER	115	OTHER	151	OTHER	153
TOTAL	899	TOTAL	1214	TOTAL	607

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	16060.	**********	25.	115610.	131695.
NITROGEN	25510.	**********	1010.	1096580.	1123100.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	332675.	LOSS	2.74
NITROGEN	1436165.	LOSS	23.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
COLDWATER RIVER	23.700	1364.9	0.283	1.220	48.	417.
SHORT FORK CREEK	0.600	40.1	0.121	1.362	58.	652.
SENATOBIA CREEK	0.600	46.1	0.164	1.195	77.	568.
SENATOBIA CANAL	2.800	123.3	0.066	0.820	48.	606.
HICKAHALA CREEK	9.600	598.3	0.060	0.540	32.	289.
BEARTAIL CREEK	2.000	119.9	0.093	0.794	50.	438.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN MISSISSIPPI

NAME - ENID LAKE (EUTROPHIC)
COUNTY - YALOBUSHA
STORET NO. - 2802 WORKING PAPER NO. 360. NTIS ACCESSION NO. PB-252 342/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	1450.40	52.49	15.5	22.000	1.1

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
16.	45.	0.9	0.062	0.009	0.240	0.640

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(6/12/73) P	(8/27/73) P	(11/ 1/73) P
6.6	0.1			

SUMMARY OF PHYTOPLANKTON DATA

6/12/73 GENERA	COUNT	8/27/73 GENERA	COUNT	11/ 1/73 GENERA	COUNT
MELOSIRA	194	LYNGBYA	1124	MELOSIRA	1459
APHANIZOMENON	65	APHANIZOMENON	319	PENNATE DIATOMS	307
CYCLOTELLA	39	CRYPTOMONAS	243	CYCLOTELLA	179
FLAGELLATES	39	MELOSIRA	167	DACTYLOCOCCOPSIS	102
COELASTRUM	26	SYNEDRA	137	APHANIZOMENON	51
OTHER	102	OTHER	318	OTHER	103
TOTAL	465	TOTAL	2308	TOTAL	2201

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	9635.	**********	15.	199145.	208795.
NITROGEN	28910.	**********	625.	1228290.	1257825.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	45100.	78.	3.98
NITROGEN	589125.	53.	24.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
YOCONA RIVER CANAL	13.700	898.7	0.192	1.088	89.	529.
LONG BRANCH	1.000	71.7	0.086	1.478	43.	778.
OTOUCALOFA CREEK	4.900	303.0	0.717	3.582	360.	1839.
BYNUM CREEK	1.100	71.5	0.101	1.235	51.	635.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN MISSISSIPPI

NAME - GRENADA LAKE (EUTROPHIC)
COUNTY - CALHOUN, GRENADA, YALOBUSHA
STORET NO. - 2806 WORKING PAPER NO. 361, NTIS ACCESSION NO. PB-253 143/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	3418.80	98.38	16.5	52.000	1.1

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
17.	57.	0.6	0.051	0.010	0.305	0.735

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(6/14/73) P	(8/28/73) P	(11/ 2/73) P
6.0	0.1			

SUMMARY OF PHYTOPLANKTON DATA

6/14/73 GENERA	COUNT	8/28/73 GENERA	COUNT	11/ 2/73 GENERA	COUNT
MELOSIRA	875	MELOSIRA	171	MELOSIRA	2194
ANABAENA	267	FLAGELLATES	121	CRYPTOMONAS	49
FLAGELLATES	152	CRYPTOMONAS	61	NITZSCHIA	39
PENNATE DIATOMS	23	MERISMOPEDIA	40	EUGLENA	19
CRYPTOMONAS	12	LYNGBYA	20	ANABAENA	19
OTHER	5	OTHER	51	OTHER	136
TOTAL	1334	TOTAL	464	TOTAL	2456

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	4830.	**********	10.	149350.	154190.
NITROGEN	14040.	**********	285.	1583405.	1597730.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	139520.	10.	1.57
NITROGEN	1319175.	17.	16.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
YALOBUSHA RIVER	23.000	1572.1	0.091	1.050	43.	512.
PERRY CREEK	0.900	73.8	0.079	0.863	33.	369.
SKUNA RIVER	17.500	1126.6	0.098	0.771	49.	394.
TURKEY CREEK	5.200	334.1	0.102	0.800	50.	399.
DURDEN CREEK	0.800	57.0	0.093	0.707	26.	291.
CYPRESS CREEK	0.900	56.7	0.086	0.801	42.	395.
OKACHICKMA CREEK	0.300	22.0	0.061	0.562	22.	204.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN MISSISSIPPI

NAME - ROSS BARNETT RESERVOIR (EUTROPHIC)
COUNTY - JACKSON, MADISON, RANKIN
STORET NO. - 2804 WORKING PAPER NO. 362, NTIS ACCESSION NO. PB-253 093/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	7770.00	121.41	3.7	106.000	49.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
16.	62.	0.9	0.045	0.008	0.140	0.870

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(6/14/73) P AND N	(8/27/73) P	(11/ 2/73) P AND N
10.0	**********			

SUMMARY OF PHYTOPLANKTON DATA

6/14/73 GENERA	COUNT	8/27/73 GENERA	COUNT	11/ 2/73 GENERA	COUNT
MELOSIRA	936	OSCILLATORIA	2419	DACTYLOCOCCOPSIS	1569
STEPHANODISCUS	71	RAPHIDIOPSIS	2032	MELOSIRA	1119
CRYPTOMONAS	53	LYNGBYA	403	ANACYSTIS(MICROCYSTIS)	733
FLAGELLATES	53	MALLOMONAS	210	FLAGELLATES	720
SCENEDESMUS	35	CYCLOTELLA	194	KIRCHNERIELLA	566
OTHER	176	OTHER	708	OTHER	3189
TOTAL	1324	TOTAL	5966	TOTAL	7896

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	7000.	**********	15.	425200.	432215.
NITROGEN	28290.	**********	640.	3369160.	3398090.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	194310.	55.	3.56
NITROGEN	2649010.	22.	28.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
PEARL RIVER	90.300	6904.9	0.087	1.302	52.	408.
PELAHATCHIE CREEK	6.100	530.9	0.064	0.751	74.	472.
FANNEGUSHA CREEK	2.600	195.8	0.219	1.672	100.	797.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN MISSISSIPPI

NAME - SARDIS LAKE (EUTROPHIC)
COUNTY - LAFAYETTE, PANOLA
STORET NO. - 2805 WORKING PAPER NO. 363, NTIS ACCESSION NO. PB-252 343/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	4001.50	125.46	16.5	62.700	1.1

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
21.	61.	1.3	0.041	0.009	0.190	0.570

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(6/13/73) P	(8/27/73) P	(11/ 1/73) P AND N
6.4	**********			

SUMMARY OF PHYTOPLANKTON DATA

6/13/73 GENERA	COUNT	8/27/73 GENERA	COUNT	11/ 1/73 GENERA	COUNT
MELOSIRA	3060	LYNGBYA	1289	FLAGELLATES	1699
FLAGELLATES	205	CRYPTOMONAS	182	MELOSIRA	292
STEPHANODISCUS	43	MELOSIRA	161	CYCLOTELLA	154
CRYPTOMONAS	29	SYNEDRA	40	CRYPTOMONAS	120
SYNEDRA	15	MALLOMONAS	40	SYNEDRA	86
OTHER	15	OTHER	0	OTHER	103
TOTAL	3367	TOTAL	1712	TOTAL	2454

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	4535.	**********	**********	135540.	140075.
NITROGEN	13605.	**********	**********	1772155.	1785760.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	115755.	17.	1.12
NITROGEN	2243215.	LOSS	14.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
LITTLE TALLAHATCHIE R.	52.200	3162.4	0.072	0.806	38.	421.
LITTLE GREASY CREEK	0.100	11.9	0.031	0.850	5.	153.
GREASY CREEK	0.500	51.0	0.022	0.932	7.	294.
BLACKWATER CREEK	1.100	78.0	0.034	1.059	15.	458.
HURRICANE CREEK	0.900	72.0	0.047	1.732	18.	660.
TOBY TUBBY CREEK	1.200	131.6	0.164	1.473	13.	310.
CLEAR CREEK	1.600	109.8	0.070	1.288	32.	567.
HUDSON CREEK	0.200	24.5	0.064	1.433	14.	313.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEW JERSEY

NAME - BUDD LAKE (EUTROPHIC)
COUNTY - MORRIS
STORET NO. - 3402 WORKING PAPER NO. 364. NTIS ACCESSION NO. PB-256 603/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	12.10	1.52	1.8	0.220	144.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
22.	121.	0.7	0.082	0.012	0.205	1.640

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/17/73) P	(7/23/73) P	(10/ 1/73) N
48.5	**********			

SUMMARY OF PHYTOPLANKTON DATA

7/23/73 GENERA	COUNT	10/ 1/73 GENERA	COUNT
FLAGELLATES	1750	OSCILLATORIA	3404
ANACYSTIS(MICROCYSTIS)	996	MOUGEOTIA	2533
MELOSIRA	899	ANACYSTIS(MICROCYSTIS)	2374
STEPHANODISCUS	535	MELOSIRA	1306
CYCLOTELLA	316	PHORMIDIUM	752
OTHER	2479	OTHER	3997
TOTAL	6975	TOTAL	14366

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	5.	440.	445.
NITROGEN	**********	**********	215.	16830.	17045.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	375.	16.	0.29
NITROGEN	8200.	52.	11.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UNNAMED CREEK (B1)	0.040	1.8	0.066	2.136	42.	1522.
UNNAMED CREEK (C1)	0.010	0.5	0.055	1.945	20.	850.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEW JERSEY

NAME - DUHERNAL LAKE (EUTROPHIC)
COUNTY - MIDDLESEX
STORET NO. - 3412 WORKING PAPER NO. 365. NTIS ACCESSION NO. PB-256 607/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	245.00	0.38	1.4	4.000	2.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
10.	135.	0.8	0.082	0.010	1.420	1.820

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
6.8	0.1	(4/16/73) P	(7/22/73) P	(10/ 2/73) P

SUMMARY OF PHYTOPLANKTON DATA

7/22/73 GENERA	COUNT	10/ 2/73 GENERA	COUNT
EUNOTIA	54	FLAGELLATES	3068
OSCILLATORIA	54	DINOBRYON	186
TABELLARIA	36	EUNOTIA	37
FRAGILARIA	36	DINOFLAGELLATES	19
EUGLENA	18	STAURASTRUM	19
OTHER	36	OTHER	0
TOTAL	234	TOTAL	3329

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	19590.	**********	**********	3280.	22870.
NITROGEN	75000.	**********	10.	184695.	259705.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	8100.	65.	60.18
NITROGEN	251560.	3.	683.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
IRESICK BROOK	0.080	7.8	0.026	1.462	8.	455.
UNNAMED STREAM (C1)	0.070	4.1	**********	**********	13.*	787.*
MATCHAPONIX BROOK	1.840	113.7	0.205	2.623	13.*	746.*
MANALAPAN BROOK	1.920	113.7	0.069	2.282	14.*	779.*

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEW JERSEY

NAME - FARRINGTON LAKE (EUTROPHIC)
COUNTY - MIDDLESEX
STORET NO. - 3413 WORKING PAPER NO. 366. NTIS ACCESSION NO. PB-256 549/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	89.10	1.17	1.8	0.980	25.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
10.	100.	1.0	0.055	0.012	0.770	1.440

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/16/73) P	(7/22/73) P	(10/ 2/73) P
8.3	0.7			

SUMMARY OF PHYTOPLANKTON DATA

7/22/73 GENERA	COUNT	10/ 2/73 GENERA	COUNT
MELOSIRA	2710	FLAGELLATES	8474
TRACHELOMONAS	1019	DINOBRYON	1932
FLAGELLATES	895	MELOSIRA	772
ATTHEYA	621	ASTERIONELLA	359
OSCILLATORIA	323	TABELLARIA	331
OTHER	945	OTHER	249
TOTAL	6513	TOTAL	12117

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	1340.	1340.
NITROGEN	**********	**********	65.	68650.	68715.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1370.	LOSS	1.15
NITROGEN	71185.	LOSS	58.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
LAWRENCE BROOK	0.400	31.6	0.032	1.872	13.	767.
BEAVERDAM BROOK	0.040	5.2	0.041	2.025	10.	476.
IRELAND BROOK	0.180	16.9	0.033	2.545	11.	870.
OAKEYS BROOK	0.090	10.5	0.082	1.838	23.	527.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEW JERSEY

NAME - GREENWOOD LAKE (EUTROPHIC)
COUNTY - PASSAIC, NJ; ORANGE, NY
STORET NO. - 3403 WORKING PAPER NO. 367, NTIS ACCESSION NO. PB-256 550/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	70.20	7.77	5.2	1.400	346.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
16.	94.	2.2	0.021	0.007	0.100	0.550

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
11.9	1.5	(4/16/73) P	(7/23/73) N	(10/ 1/73) N

SUMMARY OF PHYTOPLANKTON DATA

4/16/73 GENERA	COUNT	10/ 1/73 GENERA	COUNT
ASTERIONELLA	3099	FLAGELLATES	455
FLAGELLATES	1439	MELOSIRA	227
FRAGILARIA	1185	ANABAENA	178
SYNEDRA	931	CENTRIC DIATOM	130
MELOSIRA	457	TABELLARIA	114
OTHER	1795	OTHER	309
TOTAL	8906	TOTAL	1413

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	325.	**********	475.	1635.	2435.
NITROGEN	1525.	**********	17860.	43380.	62765.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1230.	49.	0.31
NITROGEN	27000.	57.	8.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BELCHER CREEK	0.830	37.6	0.039	0.718	18.	391.
UNNAMED CREEK (C1)	0.240	13.4	0.046	1.117	25.	594.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEW JERSEY

NAME - LAKE MUSCONETCONG (EUTROPHIC)
COUNTY - MORRIS, SUSSEX
STORET NO. - 3417 WORKING PAPER NO. 368. NTIS ACCESSION NO. PB-256 601/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	76.90	1.33	1.5	1.220	19.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
31.	196.	1.6	0.036	0.010	0.140	0.640

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
11.1	0.2	(4/17/73) P	(7/23/73) N	(10/ 3/73) P

SUMMARY OF PHYTOPLANKTON DATA

7/23/73 GENERA	COUNT	10/ 1/73 GENERA	COUNT
FLAGELLATES	3190	FLAGELLATES	580
MOUGEOTIA	264	KIRCHNERIELLA	224
FRAGILARIA	220	SCENEDESMUS	83
OOCYSTIS	154	ANACYSTIS(MICROCYSTIS)	24
ANKISTRODESMUS	88	CRUCIGENIA	17
OTHER	484	OTHER	59
TOTAL	4400	TOTAL	987

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	5.	805.	810.
NITROGEN	**********	**********	130.	37595.	37725.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1030.	LOSS	0.61
NITROGEN	30030.	20.	28.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
MUSCONETCONG RIVER	1.110	66.3	0.018	0.963	11.	473.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEW JERSEY

NAME - LAKE HOPATCONG (EUTROPHIC)
COUNTY - MORRIS, SUSSEX
STORET NO. - 3415 WORKING PAPER NO. 368. NTIS ACCESSION NO. PB-256 601/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	66.30	10.87	5.5	0.800	623.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
23.	160.	2.1	0.022	0.007	0.120	0.555

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/17/73) P	(7/23/73) P	(10/ 3/73) N
13.6	**********			

SUMMARY OF PHYTOPLANKTON DATA

4/17/73 GENERA	COUNT	7/23/73 GENERA	COUNT	10/ 3/73 GENERA	COUNT
TABELLARIA	17638	FLAGELLATES	1135	MELOSIRA	1240
ASTERIONELLA	8435	TABELLARIA	1054	FLAGELLATES	717
SYNEDRA	4175	FRAGILARIA	730	DINOBRYON	401
CYCLOTELLA	3579	DINOBRYON	297	STEPHANODISCUS	384
FRAGILARIA	3067	ASTERIONELLA	135	KIRCHNERIELLA	245
OTHER	5795	OTHER	378	OTHER	1030
TOTAL	42689	TOTAL	3729	TOTAL	4017

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	345.	**********	320.	625.	1290.
NITROGEN	1070.	**********	11980.	40875.	53925.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	710.	45.	0.12
NITROGEN	31370.	42.	5.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UNNAMED STREAM (81)	0.270	21.0	0.016	1.085	7.	443.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEW JERSEY

NAME - ORADELL RESERVOIR (EUTROPHIC)
COUNTY - BERGEN
STORET NO. - 3406 WORKING PAPER NO. 370. NTIS ACCESSION NO. PB-256 667/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	292.70	2.64	4.1	5.200	23.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
78.	290.	0.9	0.055	0.008	0.990	1.630

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
22.3	5.2	(4/16/73) P	(7/22/73) P	(10/ 1/73) P

SUMMARY OF PHYTOPLANKTON DATA

4/16/73 GENERA	COUNT	7/22/73 GENERA	COUNT	10/ 1/73 GENERA	COUNT
ASTERIONELLA	11445	FRAGILARIA	2011	FRAGILARIA	15566
STEPHANODISCUS	5970	SPHAEROCYSTIS	1638	COELASTRUM	986
FLAGELLATES	4521	OOCYSTIS	498	PEDIASTRUM	386
LAGERHEIMIA	650	COELASTRUM	352	MELOSIRA	429
MELOSIRA	198	CENTRIC DIATOM	269	FLAGELLATES	300
OTHER	558	OTHER	1017	OTHER	1158
TOTAL	23342	TOTAL	5785	TOTAL	18825

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	••••••••••	••••••••••	••••••••••	13420.	13420.
NITROGEN	••••••••••	••••••••••	••••••••••	379185.	379185.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	9075.	32.	5.08
NITROGEN	334435.	12.	143.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
HACKENSACK RIVER	2.600	150.2	0.056	1.809	30.	979.
PASCACK BROOK	1.450	76.7	0.101	2.447	53.	1395.
UNNAMED STREAM (C1)	0.080	5.3	0.133	3.138	65.	1543.
DWARS KILL STREAM	0.130	8.4	0.178	3.109	94.	1602.
TENAKILL BROOK	0.500	22.2	0.093	3.594	62.	2494.
DOROTOCKEYS RUN	0.170	11.0	0.177	3.643	78.	1545.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEW JERSEY

NAME - PAULINSKILL LAKE (EUTROPHIC)
COUNTY - SUSSEX
STORET NO. - 3419 WORKING PAPER NO. 371. NTIS ACCESSION NO. PB-256 542/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	188.80	0.64	1.8	3.030	4.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
103.	365.	1.0	0.133	0.065	0.950	1.320

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
7.0	16.0	(6/17/73) N	(7/22/73) N	(10/ 2/73) N

SUMMARY OF PHYTOPLANKTON DATA

6/18/73 GENERA	COUNT	7/22/73 GENERA	COUNT	10/ 2/73 GENERA	COUNT
NAVICULA	610	FLAGELLATES	1013	FLAGELLATES	5840
FLAGELLATES	557	CYCLOTELLA	220	STEPHANODISCUS	531
STEPHANODISCUS	478	STEPHANODISCUS	176	CYCLOTELLA	190
CYCLOTELLA	133	SYNEDRA	154	FRAGILARIA	190
MELOSIRA	107	NITZSCHIA	154	SCENEDESMUS	190
OTHER	742	OTHER	639	OTHER	454
TOTAL	2627	TOTAL	2356	TOTAL	7395

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	5495.	**********	10.	6125.	11630.
NITROGEN	23870.	**********	415.	192530.	216815.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	9750.	16.	18.17
NITROGEN	190695.	12.	338.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
PAULINS KILL	2.870	179.0	0.125	2.295	33.	1027.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEW JERSEY

NAME - PINECLIFF LAKE (EUTROPHIC)
COUNTY - PASSAIC
STORET NO. - 3409 WORKING PAPER NO. 372. NTIS ACCESSION NO. PB-256 543/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	18.80	0.57	1.8	0.370	32.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
27.	107.	0.9	0.070	0.011	0.175	0.860

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
39.0	4.2	(4/16/73) N	(7/23/73) P	(10/ 2/73) N

SUMMARY OF PHYTOPLANKTON DATA

4/16/73 GENERA	COUNT	7/23/73 GENERA	COUNT	10/ 2/73 GENERA	COUNT
FLAGELLATES	1187	MELOSIRA	1304	FLAGELLATES	33237
STEPHANODISCUS	1038	FRAGILARIA	389	MELOSIRA	902
ANKISTRODESMUS	519	ANABAENA	369	STEPHANODISCUS	451
MELOSIRA	408	SCENEDESMUS	276	SCENEDESMUS	450
PENNATE DIATOMS	389	FLAGELLATES	253	PEDIASTRUM	193
OTHER	594	OTHER	902	OTHER	580
TOTAL	4135	TOTAL	3493	TOTAL	35813

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	1065.	**********	20.	895.	1980.
NITROGEN	2030.	**********	830.	10900.	13760.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	800.	60.	3.47
NITROGEN	9595.	30.	24.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BELCHER CREEK	0.270	14.1	0.100	0.986	58.	567.
UNNAMED CREEK (A1)	0.050	1.6	0.022	0.728	22.	709.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEW JERSEY

NAME - POMPTON LAKES (EUTROPHIC)
COUNTY - PASSAIC
STORET NO. - 3410 WORKING PAPER NO. 373. NTIS ACCESSION NO. PB-256 544/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	414.40	0.83	1.8	8.300	2.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
49.	190.	0.9	0.071	0.029	0.795	1.145

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/17/73) P	(7/22/73) P	(10/ 2/73) P
23.0	8.5			

SUMMARY OF PHYTOPLANKTON DATA

4/17/73 GENERA	COUNT	7/22/73 GENERA	COUNT	10/ 2/73 GENERA	COUNT
NAVICULA	1577	MELOSIRA	829	FLAGELLATES	14505
MELOSIRA	681	APHANIZOMENON	609	MELOSIRA	6484
STEPHANODISCUS	430	NAVICULA	463	CYCLOTELLA	1003
ASTERIONELLA	203	FLAGELLATES	317	STEPHANODISCUS	535
FLAGELLATES	167	FRAGILARIA	171	COELASTRUM	267
OTHER	347	OTHER	389	OTHER	468
TOTAL	3405	TOTAL	2778	TOTAL	23262

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	11315.	**********	5.	28425.	39745.
NITROGEN	35560.	**********	235.	447190.	482985.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	16100.	59.	47.89
NITROGEN	327150.	32.	581.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
RAMAPO RIVER	7.960	388.5	0.159	1.888	72.	1111.
UNNAMED STREAM (B1)	0.140	10.8	0.033	1.282	13.	498.
UNNAMED STREAM (C1)	0.050	4.6	0.094	2.713	29.	878.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEW JERSEY

NAME - SPRUCE RUN RESERVOIR (EUTROPHIC)
COUNTY - HUNTERDON
STORET NO. - 3420 WORKING PAPER NO. 374. NTIS ACCESSION NO. PB-256 545/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	107.00	5.22	7.9	1.500	296.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
31.	130.	1.8	0.020	0.007	0.470	0.760

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/18/73) P	(7/22/73) P	(10/ 2/73) P
15.3	1.3			

SUMMARY OF PHYTOPLANKTON DATA

4/18/73 GENERA	COUNT	7/22/73 GENERA	COUNT	10/ 2/73 GENERA	COUNT
SYNEDRA	13519	CYCLOTELLA	5711	CYCLOTELLA	951
ASTERIONELLA	4953	FLAGELLATES	1179	FLAGELLATES	852
MELOSIRA	1869	COELOSPHAERIUM	471	MELOSIRA	416
FLAGELLATES	1775	TETRAEDRON	340	TETRAEDRON	377
OSCILLATORIA	997	RHIZOSOLENIA	262	SCENEDESMUS	159
OTHER	1184	OTHER	892	OTHER	317
TOTAL	24297	TOTAL	8855	TOTAL	3072

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	40.	**********	1.	1415.	1456.
NITROGEN	120.	**********	10.	80435.	80565.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	875.	40.	0.28
NITROGEN	57815.	28.	15.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SPRUCE RUN	0.570	40.1	0.035	1.582	16.	740.
MULHOCKAWAY CREEK	0.420	30.6	0.023	1.541	10.	717.
UNNAMED STREAM (C1)	0.110	7.1	0.022	1.638	7.	820.
WILLOUGHBY BROOK	0.090	6.3	0.024	1.098	11.	513.
BLACK BROOK	0.070	4.5	0.032	1.350	16.	661.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEW JERSEY

NAME - UNION LAKE (EUTROPHIC)
COUNTY - CUMBERLAND
STORET NO. - 3422 WORKING PAPER NO. 375. NTIS ACCESSION NO. PB-256 546/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	564.60	3.60	2.7	8.700	12.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
10.	84.	0.9	0.063	0.018	1.150	1.700

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/16/73) P	(7/20/73) P	(9/28/73) P
22.1	1.3			

SUMMARY OF PHYTOPLANKTON DATA

4/16/73 GENERA	COUNT	7/20/73 GENERA	COUNT	9/28/73 GENERA	COUNT
FLAGELLATES	576	MELOSIRA	6732	APHANOTHECE	2077
FRAGILARIA	107	FRAGILARIA	931	FLAGELLATES	1547
MELOSIRA	74	CHROOCOCCUS	421	FRAGILARIA	1458
CENTRIC DIATOM	33	TABELLARIA	300	MELOSIRA	1149
PENNATE DIATOMS	33	STIPITOCOCCUS	180	APHANIZOMENON	795
OTHER	74	OTHER	480	OTHER	2299
TOTAL	897	TOTAL	9044	TOTAL	9325

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	5890.	**********	5.	5170.	11065.
NITROGEN	17660.	**********	140.	667790.	685590.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	12430.	LOSS	3.07
NITROGEN	593375.	13.	190.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
MAURICE RIVER	8.000	499.9	0.042	2.580	9.	1234.
MILL CREEK	0.480	39.1	0.026	1.909	10.	726.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NEW JERSEY

NAME - WANAQUE RESERVOIR (MESOTROPHIC)
COUNTY - PASSAIC
STORET NO. - 3423 WORKING PAPER NO. 376. NTIS ACCESSION NO. PB-256 547/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	234.10	9.35	11.3	4.700	218.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
13.	80.	3.7	0.014	0.005	0.120	0.490

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/17/73) P	(7/22/73) P	(10/ 1/73) P
7.1	**********			

SUMMARY OF PHYTOPLANKTON DATA

4/17/73 GENERA	COUNT	7/22/73 GENERA	COUNT	10/ 1/73 GENERA	COUNT
TABELLARIA	1203	FLAGELLATES	701	FLAGELLATES	980
MELOSIRA	1141	MELOSIRA	660	MELOSIRA	513
ASTERIONELLA	1103	FRAGILARIA	325	STEPHANODISCUS	301
FRAGILARIA	652	ASTERIONELLA	132	FRAGILARIA	223
FLAGELLATES	564	PERIDINIUM	102	ASTERIONELLA	100
OTHER	1968	OTHER	162	OTHER	178
TOTAL	6631	TOTAL	2082	TOTAL	2295

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	365.	**********	**********	3380.	3745.
NITROGEN	1305.	**********	**********	105330.	106635.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	3360.	10.	0.40
NITROGEN	148785.	LOSS	11.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
WANAQUE RIVER	2.190	104.6	0.028	0.681	15.	415.
WEST BROOK	0.640	30.6	0.014	0.552	8.	342.
RINGWOOD CREEK	0.890	49.5	0.013	0.678	7.	362.
CUPSAW BROOK	0.210	11.3	0.032	0.773	17.	377.
UNNAMED STREAM (G1)	0.050	2.3	0.087	1.708	59.	1141.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NORTH CAROLINA

NAME - BADIN LAKE (EUTROPHIC)
COUNTY - MONTGOMERY, STANLY
STORET NO. - 3701 WORKING PAPER NO. 377, NTIS ACCESSION NO. PB-251 777/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	10818.40	24.17	14.2	141.400	28.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
21.	68.	0.8	0.042	0.012	0.680	0.870

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(3/24/73) P	(7/11/73) P	(9/19/73) P
7.2	6.3			

SUMMARY OF PHYTOPLANKTON DATA

3/24/73 GENERA	COUNT	7/11/73 GENERA	COUNT	9/19/73 GENERA	COUNT
CRYPTOMONAS	97	RAPHIDIOPSIS	21134	RAPHIDIOPSIS	15705
MELOSIRA	58	SYNEDRA	2138	OSCILLATORIA	897
TRACHELOMONAS	48	COCCOID CELLS	576	SCENEDESMUS	192
ASTERIONELLA	48	ANACYSTIS(MICROCYSTIS)	411	MELOSIRA	124
FLAGELLATES	29	SCENEDESMUS	247	SYNEDRA	32
OTHER	98	OTHER	575	OTHER	36
TOTAL	378	TOTAL	25081	TOTAL	16986

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	1155.	**********	55.	401455.	402665.
NITROGEN	3460.	**********	2140.	5241805.	5247405.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	316515.	21.	16.66
NITROGEN	5275525.	LOSS	217.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
YADIN RIVER	139.800	10657.8	0.090	1.158	37.	486.
BEAVERDAM CREEK	0.200	23.1	0.034	0.830	11.	267.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NORTH CAROLINA

NAME - BLEWETT FALLS LAKE (EUTROPHIC)
COUNTY - ANSON, RICHMOND
STORET NO. - 3702 WORKING PAPER NO. 378. NTIS ACCESSION NO. PB-251 778/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	17793.30	10.36	11.6	213.600	7.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
22.	82.	0.6	0.090	0.034	0.655	0.935

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(3/23/73) P	(7/ 5/73) P	(9/19/73) P AND N
4.2	**********			

SUMMARY OF PHYTOPLANKTON DATA

3/23/73 GENERA	COUNT	7/ 5/73 GENERA	COUNT	9/19/73 GENERA	COUNT
SYNEDRA	30	MELOSIRA	202	RAPHIDIOPSIS	1173
OSCILLATORIA	29	NITZSCHIA	130	FLAGELLATES	156
CRYPTOMONAS	22	CRYPTOMONAS	72	MELOSIRA	118
TABELLARIA	7	OSCILLATORIA	58	NITZSCHIA	98
SCENEDESMUS	7	STEPHANODISCUS	58	SYNEDRA	59
OTHER	15	OTHER	171	OTHER	155
TOTAL	110	TOTAL	691	TOTAL	1759

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	22020.	**********	**********	921515.	943535.
NITROGEN	63485.	**********	**********	8220400.	8283885.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	517685.	45.	91.07
NITROGEN	7005540.	15.	799.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
PEE PEE RIVER	198.000	16397.3	0.147	1.224	55.	470.
CEDAR CREEK	0.300	40.4	0.025	0.575	7.	155.
SAVANNAH RIVER	0.300	37.0	0.032	0.803	8.	197.
SMITH CREEK	0.200	26.2	0.026	0.471	9.*	231.*
MOUNTAIN CREEK	2.600	194.2	0.043	1.240	12.	494.
LITTLE RIVER	9.600	911.7	0.042	1.127	10.	366.
DRY CREEK	0.200	20.7	0.045	1.048	12.	240.
CARTLEDGE CREEK	1.200	78.5	0.025	0.716	8.	332.

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NORTH CAROLINA

NAME - FONTANA LAKE (MESOTROPHIC)
COUNTY - SWAIN, GRAHAM
STORET NO. - 3704 WORKING PAPER NO. 379. NTIS ACCESSION NO. PB-246 632/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	4068.90	43.18	41.3	114.800	179.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
10.	30.	2.7	0.011	0.007	0.550	0.800

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(6/ 2/73) P	(8/21/73) P	(10/26/73) P
3.4	0.1 - 0.1 (2)			

SUMMARY OF PHYTOPLANKTON DATA

6/ 2/73 GENERA	COUNT	6/ 3/73 GENERA	COUNT	8/21/73 GENERA	COUNT	10/26/73 GENERA	COUNT
CYCLOTELLA	1581	CYCLOTELLA	2202	FLAGELLATES	894	SYNEDRA	267
MELOSIRA	566	FLAGELLATES	839	CYCLOTELLA	623	FLAGELLATES	187
FLAGELLATES	189	MELOSIRA	760	BLUE-GREEN FILAMENT	244	CYCLOTELLA	178
TABELLARIA	71	TABELLARIA	65	DINOFLAGELLATES	81	TABELLARIA	125
ASTERIONELLA	71	ASTERIONELLA	65	MELOSIRA	54	MELOSIRA	98
OTHER	24	OTHER	93	OTHER	271	OTHER	81
TOTAL	2502	TOTAL	4024	TOTAL	2167	TOTAL	936

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	6245.	**********	25.	117905.	124175.
NITROGEN	18310.	**********	920.	3758845.	3778075.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	65830.	47.	2.88
NITROGEN	5279760.	LOSS	87.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
LITTLE TENNESSEE RIVER	29.600	1139.6	0.066	0.595	46.	497.
TUCKASEGEE RIVER	43.600	1706.8	0.034	1.840	25.	1503.
ALARKA CREEK	3.000	80.8	0.027	0.612	32.	528.
NANTAHALA RIVER	15.600	427.3	0.010	0.549	12.	640.
PANTHER CREEK	0.600	28.7	0.015	0.293	11.	214.
STECOAH CREEK	1.000	27.2	0.034	0.893	41.	1077.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NORTH CAROLINA

NAME - HICKORY LAKE (EUTROPHIC)
COUNTY - ALEXANDER, CALDWELL, CATAWBA
STORET NO. - 3705 WORKING PAPER NO. 380, NTIS ACCESSION NO. PB-251 779/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	3392.90	16.63	9.5	55.900	33.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
12.	50.	1.0	0.047	0.008	0.320	0.500

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(3/30/73) P	(7/ 7/73) P	(9/24/73) P
7.3	3.9			

SUMMARY OF PHYTOPLANKTON DATA

3/30/73 GENERA	COUNT	7/ 7/73 GENERA	COUNT	9/24/73 GENERA	COUNT
MELOSIRA	353	ANABAENA	460	BLUE-GREEN FILAMENT	1671
FLAGELLATES	181	FLAGELLATES	371	RAPHIDIOPSIS	789
ASTERIONELLA	57	OSCILLATORIA	300	FLAGELLATES	464
SYNEDRA	19	MELOSIRA	265	ANABAENA	449
ANKISTRODESMUS	19	CYCLOTELLA	141	LYNGBYA	418
OTHER	19	OTHER	566	OTHER	1470
TOTAL	648	TOTAL	2103	TOTAL	5261

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	11015.	**********	**********	90050.	101065.
NITROGEN	27455.	**********	**********	1791145.	1818600.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	71355.	29.	6.08
NITROGEN	1155610.	36.	109.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CATAWBA RIVER	50.000	2880.1	0.053	0.998	29.	560.
UNNAMED CREEK (B1)	0.200	12.9	0.036	1.208	18.	616.
UNNAMED CREEK (C1)	0.100	7.0	0.081	1.420	44.	782.
GUNPOWDER CREEK	1.000	93.2	0.156	1.230	3.	238.
UPPER LITTLE RIVER	0.300	25.9	0.017	0.823	7.	324.
MIDDLE LITTLE RIVER	1.700	129.5	0.038	0.683	15.	214.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NORTH CAROLINA

NAME - HIGH ROCK LAKE (EUTROPHIC)
COUNTY - DAVIDSON, ROWAN
STORET NO. - 3706

WORKING PAPER NO. 381. NTIS ACCESSION NO. PB-247 935/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	10360.00	64.29	4.9	136.600	27.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
20.	63.	0.6	0.090	0.017	0.580	0.880

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
14.3	8.6	(3/24/73) P	(7/11/73) P	(9/19/73) P

SUMMARY OF PHYTOPLANKTON DATA

3/24/73 GENERA	COUNT	7/11/73 GENERA	COUNT	9/19/73 GENERA	COUNT
FLAGELLATES	477	RAPHIDIOPSIS	7668	RAPHIDIOPSIS	11637
ANKISTRODESMUS	106	OSCILLATORIA	1945	FLAGELLATES	1727
NITZSCHIA	35	ANACYSTIS(MICROCYSTIS)	1723	BLUE-GREEN FILAMENT	740
TRACHELOMONAS	35	PENNATE DIATOMS	778	STEPHANODISCUS	411
UNKNOWN FILAMENT	35	LYNGBYA	611	MERISMOPEDIA	329
OTHER	107	OTHER	2280	OTHER	1729
TOTAL	795	TOTAL	15005	TOTAL	16573

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	298345.	**********	**********	651730.	950075.
NITROGEN	806615.	**********	**********	4812145.	5618760.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	437005.	54.	14.78
NITROGEN	5529775.	2.	87.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
YADIN RIVER	121.500	9013.2	0.100	1.258	66.	488.
FLAT SWAMP CREEK	0.400	50.8	0.027	0.817	7.	212.
SWEARING CREEK	1.000	100.5	0.480	2.061	157.	539.
FIRST POTTS CREEK	0.300	41.4	0.040	0.844	10.	225.
TOWN CREEK	0.600	49.2	2.058	5.773	385.	489.
CRANE CREEK	0.900	69.9	0.247	1.268	98.	505.
UNNAMED CREEK (G1)	0.500	46.6	0.038	0.566	12.	183.
SECOND CREEK	0.400	88.1	0.156	1.328	11.	189.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NORTH CAROLINA

NAME - HIWASSEE LAKE (MESOTROPHIC)
COUNTY - CHEROKEE
STORET NO. - 3707 WORKING PAPER NO. 382. NTIS ACCESSION NO. PB-250 578/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	2507.10	25.41	21.3	53.800	116.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
10.	50.	2.0	0.015	0.007	0.240	0.420

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(6/ 1/73) P	(8/23/73) P	(10/26/73) P
5.7	0.1			

SUMMARY OF PHYTOPLANKTON DATA

6/ 1/73 GENERA	COUNT	6/ 2/73 GENERA	COUNT	8/23/73 GENERA	COUNT	10/26/73 GENERA	COUNT
OSCILLATORIA	8351	SYNEDRA	1126	ANABAENA	2226	CYCLOTELLA	615
SYNEDRA	4342	TABELLARIA	270	GLOEOCYSTIS	268	MELOSIRA	259
COCCOID CELLS	1586	COCCOID CELLS	158	COCCOID CELLS	167	FLAGELLATES	224
TABELLARIA	941	FLAGELLATES	113	FLAGELLATES	151	ANABAENA	160
CYCLOTELLA	251	CYCLOTELLA	68	MALLOMONAS	134	ASTERIONELLA	85
OTHER	564	OTHER	157	OTHER	352	OTHER	289
TOTAL	16035	TOTAL	1892	TOTAL	3298	TOTAL	1632

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	4415.	**********	25.	40930.	45370.
NITROGEN	13240.	**********	875.	941430.	955545.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	25000.	45.	1.79
NITROGEN	1013130.	LOSS	37.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
HIWASSEE RIVER	23.300	1090.4	0.023	0.536	15.	372.
BEAVERDAM CREEK	1.600	66.8	0.014	0.316	11.	248.
BEARPAW CREEK	0.300	14.0	0.048	0.510	37.	397.
LAKE CHEROKEE OUTLET	1.000	42.0	0.021	0.577	16.	452.
NOTTELY RIVER	13.300	704.5	0.031	0.607	19.	373.
VALLEY RIVER	7.200	295.3	0.028	0.513	17.	310.
HANGING DOG CREEK	2.600	105.7	0.013	0.598	10.	468.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NORTH CAROLINA

NAME - LAKE JAMES (EUTROPHIC)
COUNTY - BURKE, MCDOWELL
STORET NO. - 3708 WORKING PAPER NO. 383. NTIS ACCESSION NO. PB-250 477/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	986.80	26.35	13.5	19.800	208.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
14.	57.	1.8	0.020	0.006	0.160	0.475

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
7.7	0.4	(3/24/73) P	(7/ 5/73) P	(9/24/73) P

SUMMARY OF PHYTOPLANKTON DATA

3/24/73 GENERA	COUNT	7/ 5/73 GENERA	COUNT	9/24/73 GENERA	COUNT
MELOSIRA	556	TABELLARIA	821	LYNGBYA	1528
ASTERIONELLA	111	ANABAENA	640	CHROOCOCCUS	1510
CYCLOTELLA	87	MELOSIRA	181	FLAGELLATES	588
PENNATE DIATOMS	37	CRYPTOMONAS	85	RAPHIDIOPSIS	549
CRYPTOMONAS	37	FLAGELLATES	85	ANABAENA	353
OTHER	137	OTHER	84	OTHER	1389
TOTAL	965	TOTAL	1896	TOTAL	5917

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	1710.	••••••••••	15.	27880.	29605.
NITROGEN	7870.	••••••••••	470.	418965.	427305.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	48705.	LOSS	1.12
NITROGEN	375270.	12.	16.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CATAWBA RIVER	9.500	463.6	0.050	0.587	29.	371.
NORTH FORK CATAWBA RIVER	3.500	221.7	0.103	0.668	51.	332.
PADDY CREEK	0.300	16.3	0.011	0.513	6.	298.
LINVILLE RIVER	4.000	174.0	0.013	0.748	9.	519.

COMPENDIUM OF NATIONAL EUTHOPHICATION SURVEY LAKES IN NORTH CAROLINA

NAME - LAKE JUNALUSKA (EUTROPHIC)
COUNTY - HAYWOOD
STORET NO. - 3709 WORKING PAPER NO. 384. NTIS ACCESSION NO. PB-250 474/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	164.70	0.81	5.6	4.100	13.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
16.	105.	1.0	0.031	0.009	0.560	0.910

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
7.2	3.4	(3/24/73) P	(7/ 5/73) P	(9/20/73) P

SUMMARY OF PHYTOPLANKTON DATA

3/24/73 GENERA	COUNT	7/ 5/73 GENERA	COUNT	9/20/73 GENERA	COUNT
FLAGELLATES	850	GLOEOCYSTIS	408	GLOEOCYSTIS	3023
LYNGBYA	50	DINOBRYON	82	APHANIZOMENON	1626
CYMBELLA	36	CYSTS	82	FLAGELLATES	737
NITZSCHIA	23	PENNATE DIATOMS	72	CRYPTOMONAS	127
ACHNANTHES	14	SYNEDRA	63	ANACYSTIS(MICROCYSTIS)	127
OTHER	62	OTHER	153	OTHER	379
TOTAL	1035	TOTAL	860	TOTAL	6019

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	••••••••••	••••••••••	••••••••••	5165.	5165.
NITROGEN	••••••••••	••••••••••	••••••••••	122655.	122655.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	5740.	LOSS	6.38
NITROGEN	140225.	LOSS	151.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
RICHLAND CREEK	3.700	150.2	0.039	0.879	31.	702.
UNNAMED CREEK (R1)	0.100	1.8	0.033	1.742	28.	1408.
FACTORY BRANCH	0.300	11.2	0.055	1.431	39.	1143.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NORTH CAROLINA

NAME - LOOKOUT SHOALS LAKE (EUTROPHIC)
COUNTY - CATAWBA, ALEXANDER, IREDELL
STORET NO. - 3710 WORKING PAPER NO. 385. NTIS ACCESSION NO. PB-250 449/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	3755.50	4.14	9.3	56.900	7.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
16.	50.	1.0	0.026	0.008	0.370	0.570

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(3/30/73) P	(7/ 7/73) P	(9/24/73) P
4.2	1.6			

SUMMARY OF PHYTOPLANKTON DATA

3/30/73 GENERA	COUNT	7/ 7/73 GENERA	COUNT	9/24/73 GENERA	COUNT
MELOSIRA	613	CYCLOTELLA	318	RAPHIDIOPSIS	1781
LYNGBYA	123	LYNGBYA	258	CHROOCOCCUS	1233
PENNATE DIATOMS	46	FLAGELLATES	238	ANACYSTIS(MICROCYSTIS)	987
MALLOMONAS	46	CHLAMYDOMONAS	200	LYNGBYA	658
SCENEDESMUS	15	KIRCHNERIELLA	200	KIRCHNERIELLA	384
OTHER	93	OTHER	1226	OTHER	1260
TOTAL	936	TOTAL	2440	TOTAL	6303

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	1395.	••••••••••	••••••••••	75260.	76655.
NITROGEN	4185.	••••••••••	••••••••••	1254635.	1258820.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	77025.	LOSS	18.52
NITROGEN	1242605.	1.	304.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CATAWBA RIVER	53.000	3392.9	0.042	0.878	21.	341.
ELK SHOAL CREEK (R1)	0.200	13.7	0.033	0.824	18.	446.
LOWER LITTLE RIVER	2.600	259.0	0.049	0.821	10.	255.
ELK SHOAL CREEK (E1)	0.400	41.4	0.028	0.702	8.	198.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NORTH CAROLINA

NAME - MOUNTAIN ISLAND LAKE (MESOTROPHIC)
COUNTY - GASTON, MECKLENBURG
STORET NO. - 3711 WORKING PAPER NO. 386. NTIS ACCESSION NO. PB-250 473/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	4822.60	13.09	5.4	67.200	12.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
15.	60.	1.0	0.018	0.005	0.270	0.480

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/ 2/73) P	(7/10/73) P	(9/19/73) N
5.6	0.2			

SUMMARY OF PHYTOPLANKTON DATA

4/ 2/73 GENERA	COUNT	7/10/73 GENERA	COUNT	7/12/73 GENERA	COUNT	9/19/73 GENERA	COUNT
MELOSIRA	1178	MELOSIRA	1008	MELOSIRA	335	LYNGBYA	525
FLAGELLATES	626	FLAGELLATES	344	FLAGELLATES	112	MELOSIRA	358
ASTERIONELLA	61	PENNATE DIATOMS	295	PERIDINIUM	56	RAPHIDIOPSIS	267
DACTYLOCOCCOPSIS	25	PERIDINIUM	221	SYNEDRA	56	CHLORELLA	235
OSCILLATORIA	12	COSMARIUM	197	TETRAEDRON	37	CRYPTOMONAS	201
OTHER	25	OTHER	395	OTHER	73	OTHER	785
TOTAL	1927	TOTAL	2460	TOTAL	669	TOTAL	2371

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	56395.	56395.
NITROGEN	**********	**********	**********	1685175.	1685175.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	42815.	24.	4.31
NITROGEN	1810470.	LOSS	128.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CATAWBA RIVER	65.400	4693.1	0.024	0.760	10.	341.
MCDOWELL CREEK	1.000	69.9	0.204	1.533	91.	688.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NORTH CAROLINA

NAME - LAKE NORMAN (EUTROPHIC)
COUNTY - CATAWBA, IREDELL, LINCOLN, MECKLENBURG
STORET NO. - 3713 WORKING PAPER NO. 387, NTIS ACCESSION NO. PB-252 046/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	4636.10	131.57	10.2	72.400	239.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
15.	55.	1.3	0.019	0.005	0.330	0.550

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(3/29/73) P	(7/11/73) P	(9/19/73) P
5.8	0.1 - 2.3 (2)			

SUMMARY OF PHYTOPLANKTON DATA

3/29/73 GENERA	COUNT	7/11/73 GENERA	COUNT	9/19/73 GENERA	COUNT
MELOSIRA	1178	FLAGELLATES	1268	DACTYLOCOCCOPSIS	854
FLAGELLATES	1047	MELOSIRA	412	FLAGELLATES	438
NAVICULA	58	CYCLOTELLA	191	SYNEDRA	188
SCENEDESMUS	15	PERIDINIUM	118	PERIDINIUM	188
TREUBARIA	15	PENNATE DIATOMS	118	CYCLOTELLA	66
OTHER	57	OTHER	443	OTHER	433
TOTAL	2370	TOTAL	2550	TOTAL	2167

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	8765.	**********	200.	87025.	95990.
NITROGEN	23760.	**********	7495.	1751405.	1782660.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	30965.	68.	0.73
NITROGEN	1617200.	9.	13.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CATAWBA RIVER	63.200	3980.8	0.038	0.675	19.	346.
BALL CREEK	0.700	42.0	0.034	1.306	19.	721.
LYLE CREEK	2.600	183.9	0.065	0.862	9.	349.
BUFFALO SHOALS CREEK	0.700	54.4	0.035	0.776	14.	306.
HICKS CREEK	0.200	12.9	0.290	1.041	32.	260.
UNNAMED CREEK (F1)	0.200	12.7	0.103	1.034	39.	400.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NORTH CAROLINA

NAME - RHODHISS LAKE (EUTROPHIC)
COUNTY - BURKE, CALDWELL
STORET NO. - 3715 WORKING PAPER NO. 388. NTIS ACCESSION NO. PB-250 472/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	2823.10	14.22	6.3	48.440	21.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
15.	56.	1.0	0.061	0.019	0.305	0.510

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
3.6	6.7	(3/30/73) P AND N (7/ 6/73) P (9/24/73) P AND N

SUMMARY OF PHYTOPLANKTON DATA

3/30/73 GENERA	COUNT	7/ 6/73 GENERA	COUNT	9/24/73 GENERA	COUNT
MELOSIRA	500	OSCILLATORIA	85	LYNGBYA	1120
FLAGELLATES	130	FLAGELLATES	68	OSCILLATORIA	320
CRYPTOMONAS	60	CENTRIC DIATOM	34	MERISMOPEDIA	124
ASTERIONELLA	50	NITZSCHIA	34	FLAGELLATES	110
STEPHANODISCUS	30	APHANIZOMENON	25	SYNEDRA	104
OTHER	101	OTHER	625	OTHER	772
TOTAL	871	TOTAL	871	TOTAL	2550

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	41140.	**********	**********	161295.	202435.
NITROGEN	123375.	**********	**********	1278660.	1402035.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	106660.	47.	14.24
NITROGEN	1268715.	10.	98.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CATAWBA RIVER	33.700	1753.4	0.067	0.791	36.	413.
HUNTING CREEK	1.800	66.3	1.383	3.762	957.	2540.
HOYLE CREEK	0.200	15.8	0.633	1.260	242.	414.
MCGALLIARD CREEK	0.300	19.2	1.317	2.049	599.	762.
HOWARD CREEK	0.200	13.7	0.349	1.918	64.	659.
FREEMASON CREEK	0.300	18.9	0.064	1.507	33.	779.
STAFFORD CREEK	0.300	16.1	0.054	1.294	30.	725.
SMOKY CREEK	0.400	21.2	0.022	0.659	15.	446.
BRISTOL CREEK	0.500	23.8	0.040	0.784	29.	571.
JOHNS RIVER	5.800	541.3	0.038	0.648	13.	231.
E. FORK MCGALLIARD CREEK	0.100	2.3	0.118	1.027	65.	585.
LOWER CREEK	2.700	224.3	0.263	1.812	26.	475.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NORTH CAROLINA

NAME - SANTEETLAH LAKE (MESOTROPHIC)
COUNTY - GRAHAM
STORET NO. - 3716 WORKING PAPER NO. 389. NTIS ACCESSION NO. PB-246 627/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	455.80	11.59	16.8	14.500	161.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
10.	50.	3.4	0.011	0.006	0.160	0.330

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(6/ 3/73) P	(8/22/73) P	(10/26/73) P AND N
5.4	0.1			

SUMMARY OF PHYTOPLANKTON DATA

6/ 3/73 GENERA	COUNT	8/22/73 GENERA	COUNT	10/26/73 GENERA	COUNT
FLAGELLATES	348	ASTERIONELLA	460	ASTERIONELLA	1587
GYMNODINIUM	307	TABELLARIA	412	TABELLARIA	205
TABELLARIA	287	ANABAENA	63	FLAGELLATES	187
MALLOMONAS	184	SYNEDRA	48	GYMNODINIUM	56
GREEN CELLS	143	BLUE-GREEN FILAMENT	48	CRYPTOMONAS	56
OTHER	247	OTHER	112	OTHER	280
TOTAL	1516	TOTAL	1143	TOTAL	2371

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	1235.	**********	**********	6630.	7865.
NITROGEN	3310.	**********	**********	228705.	232015.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	5315.	32.	0.68
NITROGEN	184830.	20.	20.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CHEOAH RIVER	4.100	143.2	0.029	0.490	18.	435.
OLLIE BRANCH+BUFFALO CR.	0.300	9.5	0.037	0.663	38.	689.
MOUNTAIN CREEK	0.600	19.6	0.024	0.452	24.	467.
SNOWBIRD CREEK	4.500	109.0	0.011	0.384	15.	511.
WEST BUFFALO CREEK	1.200	35.7	0.010	0.469	10.	483.
SANTEETLAH CREEK	2.000	76.7	0.006	0.619	5.	527.
LONG CREEK	1.000	30.6	0.010	0.448	11.	491.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NORTH CAROLINA

NAME - LAKE TILLERY (EUTROPHIC)
COUNTY - MONTGOMERY, STANLY
STORET NO. - 3717 WORKING PAPER NO. 390. NTIS ACCESSION NO. PB-251 068/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	12090.10	21.29	9.7	154.800	15.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
22.	70.	0.8	0.040	0.008	0.470	0.810

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
6.8	4.4 - 11.9 (2)	(3/22/73) P	(7/ 7/73) P	(9/20/73) P

SUMMARY OF PHYTOPLANKTON DATA

3/22/73 GENERA	COUNT	7/ 7/73 GENERA	COUNT	9/20/73 GENERA	COUNT
BLUE-GREEN FILAMENT	115	RAPHIDIOPSIS	3040	RAPHIDIOPSIS	12078
SYNEDRA	38	OSCILLATORIA	883	OSCILLATORIA	664
LYNGBYA	38	COCCOID CELLS	602	FLAGELLATES	313
ANKISTRODESMUS	19	SYNEDRA	508	SYNEDRA	156
CRYPTOMONAS	10	ANACYSTIS(MICROCYSTIS)	470	ANACYSTIS(MICROCYSTIS)	117
OTHER	40	OTHER	1368	OTHER	352
TOTAL	260	TOTAL	6871	TOTAL	13680

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	1555.	**********	65.	315985.	317605.
NITROGEN	4650.	**********	2350.	4860675.	4867675.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	264015.	17.	14.92
NITROGEN	5244970.	LOSS	228.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
YADKIN RIVER	141.500	10831.4	0.065	0.979	27.	409.
CEDAR CREEK	0.100	8.5	0.449	2.294	152.	763.
JACOBS CREEK	0.300	30.0	0.050	1.190	17.	391.
UNNAMED CREEK (C2)	0.100	4.4	0.058	1.211	19.	414.
MOUNTAIN CREEK	0.400	33.2	0.045	1.477	15.	480.
LITTLE MOUNTAIN CREEK	0.300	26.2	0.549	1.964	124.	464.
UWHARRIE RIVER	10.100	976.4	0.047	0.917	15.	295.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NORTH CAROLINA

NAME - WACCAMAW LAKE (MESOTROPHIC)
COUNTY - COLUMBUS
STORET NO. - 3719 WORKING PAPER NO. 391. NTIS ACCESSION NO. PB-252 047/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	251.20	36.17	1.5	2.600	242.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
11.	63.	1.1	0.018	0.004	0.120	0.630

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
3.6	0.1	(3/22/73) P	(7/ 5/73) P	(9/20/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/22/73 GENERA	COUNT	7/ 5/73 GENERA	COUNT	9/20/73 GENERA	COUNT
MELOSIRA	1653	APHANOCAPSA	927	GOMPHOSPHAERIA	233
SYNEDRA	73	ANACYSTIS(MICROCYSTIS)	524	FLAGELLATES	198
DINOBRYON	44	CHLORELLA	302	DINOFLAGELLATES	90
CRYPTOMONAS	44	LYNGBYA	262	COSMARIUM	72
LYNGBYA	29	FLAGELLATES	101	MELOSIRA	54
OTHER	89	OTHER	502	OTHER	154
TOTAL	1932	TOTAL	2618	TOTAL	801

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	125.	2050.	2175.
NITROGEN	**********	**********	4675.	98270.	102945.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1270.	42.	0.06
NITROGEN	60215.	42.	2.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BIG CREEK	2.000	194.2	0.020	1.263	7.	275.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN NORTH CAROLINA

NAME - WATERVILLE LAKE (EUTROPHIC)
COUNTY - HAYWOOD
STORET NO. - 3718 WORKING PAPER NO. 392. NTIS ACCESSION NO. PB-252 048/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	1178.40	1.38	22.7	23.800	15.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
33.	348.	0.8	0.103	0.041	0.860	1.140

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(3/24/73) P	(7/ 5/73) P	(9/20/73) P
3.8	**********			

SUMMARY OF PHYTOPLANKTON DATA

3/24/73 GENERA	COUNT	7/ 5/73 GENERA	COUNT	9/20/73 GENERA	COUNT
OSCILLATORIA	422	MELOSIRA	1107	FLAGELLATES	102
BLUE-GREEN FILAMENT	127	SCENEDESMUS	1064	BLUE-GREEN FILAMENT	77
		CYCLOTELLA	916	DINOFLAGELLATES	64
		SELENASTRUM	852	SCENEDESMUS	39
		COELASTRUM	682	NAVICULA	26
OTHER	0	OTHER	2960	OTHER	179
TOTAL	549	TOTAL	7581	TOTAL	487

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	23470.	**********	**********	105280.	128750.
NITROGEN	131375.	**********	**********	1210275.	1341650.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	63440.	51.	93.30
NITROGEN	921575.	31.	972.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
PIGEON RIVER	19.000	922.0	0.185	1.580	96.	904.
FINES CREEK	1.600	66.8	0.222	2.134	170.	1647.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN OHIO

NAME - ATWOOD RESERVOIR (EUTROPHIC)
COUNTY - CARROL, TUSCARAWAS
STORET NO. - 3928 WORKING PAPER NO. 393. NTIS ACCESSION NO. PB-253 239/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	181.00	6.23	4.7	1.900	178.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
47.	266.	1.0	0.031	0.005	0.205	0.905

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/20/73) P	(7/30/73) P	(10/ 8/73) P
16.4	3.6			

SUMMARY OF PHYTOPLANKTON DATA

4/20/73 GENERA	COUNT	7/30/73 GENERA	COUNT	10/ 8/73 GENERA	COUNT
MELOSIRA	973	RAPHIDIOPSIS	5656	MELOSIRA	1251
CRYPTOMONAS	608	MELOSIRA	5187	RAPHIDIOPSIS	364
CENTRIC DIATOM	480	FLAGELLATES	3156	OSCILLATORIA	364
SYNEDRA	302	ACHNANTHES	969	NITZSCHIA	364
FLAGELLATES	262	CRYPTOMONAS	937	FLAGELLATES	313
OTHER	773	OTHER	5032	OTHER	1513
TOTAL	3398	TOTAL	20937	TOTAL	4169

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	2525.	**********	55.	7800.	10380.
NITROGEN	6250.	**********	2130.	127210.	135590.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	3625.	65.	1.67
NITROGEN	99260.	27.	21.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
INDIAN FORK	0.600	60.6	0.446	3.471	106.	1085.
WILLOW RUN	0.200	18.9	0.028	0.916	9.	314.
PLEASANT VALLEY RUN	0.200	20.4	0.038	1.870	12.	641.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN OHIO

NAME - BEACH CITY RESERVOIR (EUTROPHIC)
COUNTY - STARK, TUSCARAWAS
STORET NO. - 3901 WORKING PAPER NO. 394, NTIS ACCESSION NO. PB-254 912/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	777.00	1.70	1.2	7.600	3.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
72.	470.	0.3	0.122	0.015	1.990	2.910

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/20/73) P	(7/30/73) P	(10/ 6/73) P
10.9	12.8			

SUMMARY OF PHYTOPLANKTON DATA

4/20/73 GENERA	COUNT	10/ 6/73 GENERA	COUNT
SYNEDRA	203	SYNURA	124
NAVICULA	65	NITZSCHIA	124
DINOBRYON	63	SCENEDESMUS	100
CRYPTOMONAS	38	OSCILLATORIA	74
ANKISTRODESMUS	28	CYCLOTELLA	74
OTHER	138	OTHER	521
TOTAL	535	TOTAL	1017

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	3990.	**********	560.	41605.	46155.
NITROGEN	11970.	**********	20970.	828365.	861305.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	38480.	17.	27.15
NITROGEN	758765.	12.	506.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SUGAR CREEK	1.800	180.8	0.219	4.101	59.	1263.
ELM RUN	0.100	11.4	0.061	2.747	13.	868.
NORTH FORK SUGAR CREEK	0.400	44.5	0.165	2.771	51.	876.
MIDDLE FORK SUGAR CREEK	1.100	114.0	0.121	2.751	37.	854.
UNNAMED STREAM (E1)	0.100	10.6	0.032	2.011	10.	671.
INDIAN TRAIL CREEK	0.400	35.0	0.100	2.671	31.	896.
GOOSE CREEK	0.200	15.8	0.145	3.714	26.	1230.
WALNUT CREEK	0.300	34.4	0.121	3.225	37.	1044.
SOUTH FORK SUGAR CREEK	0.900	89.9	0.488	4.153	153.	1387.
EAST BRANCH SUGAR CREEK	0.700	70.7	0.197	3.304	62.	1122.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN OHIO

NAME - BERLIN RESERVOIR (EUTROPHIC)
COUNTY - MAHONING, PORTAGE, STARK
STORET NO. - 3929 WORKING PAPER NO. 395, NTIS ACCESSION NO. PB-252 049/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	642.30	8.90	4.9	6.400	81.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
74.	400.	0.9	0.042	0.006	0.900	1.470

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
15.5	2.7 - 15.0 (2)	(4/24/73) P	(7/30/73) P	(10/ 8/73) P

SUMMARY OF PHYTOPLANKTON DATA

4/24/73 GENERA	COUNT	7/30/73 GENERA	COUNT	10/ 8/73 GENERA	COUNT
MELOSIRA	1768	CENTRIC DIATOM	1169	FLAGELLATES	6627
FLAGELLATES	1681	FLAGELLATES	627	MERISMOPEDIA	776
CRYPTOMONAS	1092	MELOSIRA	576	RAPHIDIOPSIS	692
NITZSCHIA	445	PENNATE DIATOMS	322	SCENEDESMUS	407
SYNEDRA	273	CRYPTOMONAS	237	CRYPTOMONAS	325
OTHER	1034	OTHER	1236	OTHER	2519
TOTAL	6293	TOTAL	4167	TOTAL	11346

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	34990.	**********	180.	17095.	52265.
NITROGEN	83870.	**********	6685.	441030.	531585.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	12595.	76.	5.87
NITROGEN	394940.	26.	59.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
MAHONING RIVER	2.200	231.0	0.185	2.700	33.	674.
MILL CREEK	0.500	49.5	0.057	2.608	17.	843.
ISLAND CREEK	0.200	15.3	0.171	3.435	53.	917.
BEECH CREEK	0.500	49.2	0.133	2.725	28.	724.
DEER CREEK RES. OUTLET	1.000	98.4	0.042	1.774	13.	547.
WILLOW CREEK	0.200	16.8	0.044	1.518	14.	382.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN OHIO

NAME - BUCKEYE LAKE (EUTROPHIC)
COUNTY - FAIRFIELD, LICKING, PERRY
STORET NO. - 3902 WORKING PAPER NO. 396, NTIS ACCESSION NO. PB-254 264/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	114.50	12.71	1.9	1.200	233.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
77.	287.	0.3	0.179	0.020	0.380	2.690

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
186.6	**********	(4/26/73) P AND N	(7/30/73) P	(10/ 8/73) P AND N

SUMMARY OF PHYTOPLANKTON DATA

4/26/73 GENERA	COUNT	7/30/73 GENERA	COUNT	10/ 8/73 GENERA	COUNT
OSCILLATORIA	137630	CHROOCOCCUS	7430	OSCILLATORIA	13821
SYNEDRA	16192	ANACYSTIS(MICROCYSTIS)	7281	LYNGBYA	8153
RAPHIDIOPSIS	4453	STEPHANODISCUS	6910	CRYPTOMONAS	7256
ANACYSTIS(MICROCYSTIS)	3482	OSCILLATORIA	6613	CHROOCOCCUS	6047
CRYPTOMONAS	1619	LYNGBYA	6613	DACTYLOCOCCOPSIS	5874
OTHER	10442	OTHER	32087	OTHER	37979
TOTAL	173818	TOTAL	66934	TOTAL	79130

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	1580.	**********	235.	4675.	6490.
NITROGEN	3805.	**********	8840.	99110.	111755.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	5915.	9.	0.51
NITROGEN	86465.	23.	8.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
RESERVOIR FEEDER	0.400	43.5	0.239	3.712	79.	1253.
HONEY CREEK	0.200	17.5	0.214	1.931	31.	593.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN OHIO

NAME - CHARLES MILL RESERVOIR (EUTROPHIC)
COUNTY - ASHLAND, RICHLAND
STORET NO. - 3905 WORKING PAPER NO. 397, NTIS ACCESSION NO. PB-254 909/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	562.00	5.46	1.7	5.400	20.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
127.	380.	0.4	0.127	0.011	0.465	1.795

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
67.1	4.1	(4/20/73) P	(7/27/73) P	(10/ 6/73) N

SUMMARY OF PHYTOPLANKTON DATA

4/20/73 GENERA	COUNT	7/27/73 GENERA	COUNT	10/ 3/73 GENERA	COUNT
SYNEDRA	8183	STEPHANODISCUS	18427	CENTRIC DIATOM	17119
FLAGELLATES	6677	OSCILLATORIA	5770	MELOSIRA	7296
ANKISTRODESMUS	2245	MELOSIRA	4793	FLAGELLATES	4615
MELOSIRA	1655	NITZSCHIA	4514	OSCILLATORIA	3771
STEPHANODISCUS	620	MERISMOPEDIA	2885	RAPHIDIOPSIS	2680
OTHER	591	OTHER	9259	OTHER	27389
TOTAL	19971	TOTAL	45648	TOTAL	62868

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	17380.	**********	50.	12920.	30350.
NITROGEN	47700.	**********	1895.	447055.	496650.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	25060.	17.	5.56
NITROGEN	448155.	10.	91.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BLACK FK., MOHICAN RIVER	3.700	375.5	0.197	3.215	30.	925.
UNNAMED CREEK (B1)	0.200	21.5	0.029	1.574	5.	492.
WHETSTONE CREEK	0.400	43.5	0.035	1.747	11.	540.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN OHIO

NAME - DEER CREEK RESERVOIR (EUTROPHIC)
COUNTY - FAYETTE, PICKAWAY
STORET NO. - 3906 WORKING PAPER NO. 398. NTIS ACCESSION NO. PB-252 050/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	717.40	5.17	5.0	7.200	42.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
194.	480.	0.8	0.098	0.036	2.980	3.460

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/28/73) P	(8/ 1/73) P	(10/10/73) P
9.9	5.9			

SUMMARY OF PHYTOPLANKTON DATA

4/28/73 GENERA	COUNT	8/ 1/73 GENERA	COUNT	10/10/73 GENERA	COUNT
FLAGELLATES	2373	FLAGELLATES	653	FLAGELLATES	4939
MELOSIRA	744	CYCLOTELLA	522	ANACYSTIS(MICROCYSTIS)	2120
CRYPTOMONAS	538	MELOSIRA	261	RAPHIDIOPSIS	1552
NAVICULA	333	EUGLENA	176	MERISMOPEDIA	1180
BLUE-GREEN FILAMENT	253	NITZSCHIA	102	CENTRIC DIATOM	1180
OTHER	1170	OTHER	201	OTHER	5484
TOTAL	5411	TOTAL	1915	TOTAL	16455

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	10515.	**********	**********	18120.	28635.
NITROGEN	26605.	**********	**********	728935.	755540.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	22850.	20.	5.54
NITROGEN	796410.	LOSS	146.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
DEER CREEK	6.100	613.8	0.134	3.306	26.	993.
DUFFS FORK	0.300	32.4	0.065	3.532	21.	1183.
CLARK RUN	0.200	16.7	0.088	3.328	28.	1114.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN OHIO

NAME - DELAWARE RESERVOIR (EUTROPHIC)
COUNTY - DELAWARE
STORET NO. - 3907 WORKING PAPER NO. 399. NTIS ACCESSION NO. PB-251 780/AS

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	999.70	5.26	3.3	9.800	23.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
148.	470.	0.4	0.086	0.024	2.340	3.000

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/26/73)	(8/ 1/73)	(10/10/73)
10.9	0.8	P	P	P

SUMMARY OF PHYTOPLANKTON DATA

4/26/73 GENERA	COUNT	8/ 1/73 GENERA	COUNT	10/10/73 GENERA	COUNT
FLAGELLATES	4305	CYCLOTELLA	415	STEPHANODISCUS	819
CRYPTOMONAS	1897	EUGLENA	236	MELOSIRA	109
CENTRIC DIATOM	1109	MELOSIRA	139	FLAGELLATES	82
COCCOID CELLS	773	FLAGELLATES	99	GYMNODINIUM	55
SYNEDRA	379	GYMNODINIUM	20	TRACHELOMONAS	55
OTHER	585	OTHER	170	OTHER	300
TOTAL	9048	TOTAL	1079	TOTAL	1420

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	13850.	**********	120.	51705.	65675.
NITROGEN	49160.	**********	4495.	1125790.	1179445.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	38245.	42.	12.49
NITROGEN	1054250.	11.	224.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
OLENTANGY RIVER	4.700	468.8	0.251	3.704	56.	1180.
RIFFLE CREEK	0.400	45.1	0.135	4.795	41.	1476.
GRAVE CREEK	0.300	29.3	0.431	3.601	129.	1104.
QUQUA CREEK	0.300	31.1	0.345	3.675	103.	1126.
WHETSTONE CREEK	2.500	255.6	0.166	2.444	37.	744.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN OHIO

NAME - DILLON RESERVOIR (EUTROPHIC)
COUNTY - MUSKINGUM
STORET NO. - 3908 WORKING PAPER NO. 400. NTIS ACCESSION NO. PB-254 910/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	1921.80	5.36	3.0	20.700	9.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(MMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
135.	400.	0.5	0.163	0.037	1.590	2.700

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/26/73) P	(7/30/73) P	(10/ 8/73) P
27.4	11.7			

SUMMARY OF PHYTOPLANKTON DATA

4/26/73 GENERA	COUNT	7/30/73 GENERA	COUNT	10/ 8/73 GENERA	COUNT
OSCILLATORIA	8710	FLAGELLATES	2755	FLAGELLATES	11358
NITZSCHIA	2393	MERISMOPEDIA	2280	OSCILLATORIA	1045
SCENEDESMUS	100	STEPHANODISCUS	2185	STEPHANODISCUS	950
NAVICULA	100	NITZSCHIA	1995	SCENEDESMUS	430
CENTRIC DIATOM	100	CHROOCOCCUS	1900	RAPHIDIOPSIS	294
OTHER	831	OTHER	9022	OTHER	1444
TOTAL	12234	TOTAL	20137	TOTAL	15521

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	71770.	75.	30.	104545.	176420.
NITROGEN	825185.	**********	1100.	1686705.	2512990.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	86675.	51.	32.91
NITROGEN	1963950.	22.	468.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
LICKING RIVER	15.200	1390.8	0.354	4.649	72.	1024.
BIG RUN	0.200	14.6	0.028	1.336	10.	474.
STUMP RUN	0.100	8.9	0.023	1.220	7.	425.
ROCKY FORK	2.000	193.7	0.021	1.493	7.	498.
BOWLING GREEN RUN	0.100	12.8	0.046	1.525	15.	534.
CLAYLICK CREEK	0.500	49.7	0.041	1.687	14.	576.
BRUSHY FORK	0.400	40.9	0.018	0.794	6.	273.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN OHIO

NAME - LAKE GRANT (EUTROPHIC)
COUNTY - BROWN
STORET NO. - 3912

WORKING PAPER NO. 401. NTIS ACCESSION NO. PB-253 118/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	68.10	0.76	1.9	0.700	24.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
55.	195.	0.3	0.113	0.019	0.570	1.800

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME	
		(8/ 1/73) P	(10/ 9/73) P
40.5	**********		

SUMMARY OF PHYTOPLANKTON DATA

GENERA	8/ 1/73 COUNT	GENERA	10/ 9/73 COUNT
MELOSIRA	5415	OSCILLATORIA	22091
STEPHANODISCUS	4459	MELOSIRA	16300
NITZSCHIA	1384	CENTRIC DIATOM	14584
TRACHELOMONAS	590	PENNATE DIATOMS	10938
CRYPTOMONAS	570	FLAGELLATES	9008
OTHER	2692	OTHER	33674
TOTAL	15110	TOTAL	106595

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	1480.	**********	**********	4985.	6465.
NITROGEN	4440.	**********	**********	38775.	43215.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	5480.	15.	8.51
NITROGEN	52300.	LOSS	56.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
STEHLING RUN	0.600	53.1	0.213	1.858	73.	558.
PLUM CREEK	0.100	5.2	0.215	1.632	76.	588.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN OHIO

NAME - HOLIDAY LAKE (EUTROPHIC)
COUNTY - HURON
STORET NO. - 3930 WORKING PAPER NO. 402, NTIS ACCESSION NO. PB-251 781/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	35.70	0.91	3.9	0.400	103.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
127.	546.	0.9	0.125	0.034	0.575	2.335

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME	
55.4	21.0	(7/27/73) P	(10/ 6/73) N

SUMMARY OF PHYTOPLANKTON DATA
10/ 6/73

GENERA	COUNT
COELOSPHAERIUM	827
ANACYSTIS(MICROCYSTIS)	229
MELOSIRA	92
CRYPTOMONAS	46
TRACHELOMONAS	23
OTHER	139
TOTAL	1356

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	6250.	**********	35.	1365.	7650.
NITROGEN	18740.	**********	1385.	42480.	62605.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1495.	80.	8.41
NITROGEN	28635.	54.	68.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UNNAMED STREAM (A2)	0.100	14.7	0.134	2.993	43.	1006.
UNNAMED STREAM (B1)	0.100	4.5	0.934	8.786	38.*	1243.*
UNNAMED STREAM (C1)	0.100	7.3	0.104	4.377	33.	1479.

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN OHIO

NAME - HOOVER RESERVOIR (EUTROPHIC)
COUNTY - DELAWARE, FRANKLIN
STORET NO. - 3914 WORKING PAPER NO. 403, NTIS ACCESSION NO. PB-253 082/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	492.10	11.43	6.5	4.900	179.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
92.	299.	0.9	0.040	0.008	1.640	2.300

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/26/73) P	(8/ 1/73) P	(10/10/73) P
13.0	1.8			

SUMMARY OF PHYTOPLANKTON DATA

4/26/73 GENERA	COUNT	8/ 1/73 GENERA	COUNT	10/10/73 GENERA	COUNT
FLAGELLATES	9547	MELOSIRA	829	FLAGELLATES	1157
MELOSIRA	2815	FLAGELLATES	353	MELOSIRA	579
CRYPTOMONAS	1332	STEPHANODISCUS	207	CRYPTOMONAS	386
STEPHANODISCUS	993	CRYPTOMONAS	124	CYCLOTELLA	265
PENNATE DIATOMS	151	TRACHELOMONAS	62	SYNEDRA	241
OTHER	273	OTHER	126	OTHER	481
TOTAL	15111	TOTAL	1701	TOTAL	3109

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	5425.	**********	50.	14395.	19870.
NITROGEN	14720.	**********	1875.	357950.	374545.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	6985.	65.	1.74
NITROGEN	336455.	10.	32.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BIG WALNUT CREEK	2.800	284.9	0.140	2.244	31.	579.
LITTLE WALNUT CREEK	0.800	83.1	0.090	2.446	28.	785.
DUNCAN RUN	0.400	38.1	0.081	2.338	25.	763.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN OHIO

NAME - INDIAN LAKE (EUTROPHIC)
COUNTY - LOGAN
STORET NO. - 3915 WORKING PAPER NO. 404. NTIS ACCESSION NO. PB-252 344/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	258.50	24.82	2.3	2.400	275.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
126.	359.	0.4	0.120	0.012	0.380	2.070

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 4/73) P	(8/ 2/73) P	(10/11/73) N
76.9	6.5			

SUMMARY OF PHYTOPLANKTON DATA

5/ 4/73 GENERA	COUNT	8/ 2/73 GENERA	COUNT	10/11/73 GENERA	COUNT
OSCILLATORIA	10187	RAPHIDIOPSIS	26980	LYNGBYA	41319
ANKISTRODESMUS	3374	OSCILLATORIA	25699	OSCILLATORIA	18403
NITZSCHIA	1933	NITZSCHIA	9713	NITZSCHIA	11632
ANACYSTIS(MICROCYSTIS)	1212	SYNEDRA	4722	MERISMOPEDIA	11458
RAPHIDIOPSIS	1146	LYNGBYA	3102	ANACYSTIS(MICROCYSTIS)	7465
OTHER	4782	OTHER	8836	OTHER	18404
TOTAL	22634	TOTAL	79052	TOTAL	108681

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	290.	6675.	6965.
NITROGEN	**********	**********	10825.	250220.	261045.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	9500.	LOSS	0.28
NITROGEN	195610.	25.	10.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
S. FK. MIAMI RIVER	1.200	129.5	0.070	2.377	20.	714.
N. FK. MIAMI RIVER	0.500	51.5	0.116	4.333	34.	1257.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN OHIO

NAME - LAKE LORAMIE (EUTROPHIC)
COUNTY - SHELBY, AUGLAIZE
STORET NO. - 3917 WORKING PAPER NO. 405. NTIS ACCESSION NO. PB-253 095/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	201.20	3.18	1.5	1.900	29.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
142.	373.	0.2	0.185	0.019	1.380	3.600

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/ 4/73) P	(8/ 1/73) P	(10/11/73) N
104.1	15.5			

SUMMARY OF PHYTOPLANKTON DATA

5/ 4/73 GENERA	COUNT	8/ 1/73 GENERA	COUNT	10/11/73 GENERA	COUNT
MELOSIRA	21531	STEPHANODISCUS	14576	MERISMOPEDIA	11829
CHLORELLA	8312	FLAGELLATES	10380	OSCILLATORIA	11063
STEPHANODISCUS	6152	CRYPTOMONAS	3092	CYCLOTELLA	8872
OSCILLATORIA	4450	MELOSIRA	1619	DACTYLOCOCCOPSIS	6572
FLAGELLATES	2225	PTEROMONAS	1178	SYNEDRA	5258
OTHER	6348	OTHER	7435	OTHER	23005
TOTAL	49018	TOTAL	38280	TOTAL	66599

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	4825.	**********	40.	8540.	13405.
NITROGEN	14470.	**********	1475.	235600.	251545.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	22195.	LOSS	4.22
NITROGEN	347415.	LOSS	79.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
LORAMIE CREEK	1.100	112.9	0.227	3.496	49.	1109.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN OHIO

NAME - MOSQUITO CREEK RESERVOIR (EUTROPHIC)
COUNTY - TRUMBULL
STORET NO. - 3921 WORKING PAPER NO. 406. NTIS ACCESSION NO. PB-251 782/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	252.50	31.57	2.7	2.400	352.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
45.	218.	0.9	0.058	0.006	0.150	1.140

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/21/73) P	(7/30/73) P	(10/ 9/73) P
36.3	**********			

SUMMARY OF PHYTOPLANKTON DATA

4/21/73 GENERA	COUNT	7/30/73 GENERA	COUNT	10/ 9/73 GENERA	COUNT
SYNEDRA	4802	OSCILLATORIA	27076	SCENEDESMUS	3800
FLAGELLATES	4524	LYNGBYA	14711	MELOSIRA	2985
ANACYSTIS(MICROCYSTIS)	4365	STEPHANODISCUS	10650	CYCLOTELLA	2220
OSCILLATORIA	1349	ANACYSTIS(MICROCYSTIS)	7220	SCHROEDERIA	1877
ASTERIONELLA	714	MERISMOPEDIA	6679	DACTYLOCOCCOPSIS	1685
OTHER	8373	OTHER	23014	OTHER	8518
TOTAL	24127	TOTAL	89350	TOTAL	21085

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	3625.	**********	**********	6360.	9985.
NITROGEN	7710.	**********	**********	184965.	192675.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	5425.	46.	0.32
NITROGEN	139900.	27.	6.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
MOSQUITO CREEK	0.600	57.5	0.069	1.632	22.	581.
UNNAMED CREEK (R1)	0.100	9.8	0.087	2.088	28.	742.
WALNUT CREEK	0.200	25.1	0.090	1.775	27.	591.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN OHIO

NAME - O'SHAUGHNESSY RESERVOIR (EUTROPHIC)
COUNTY - DELAWARE
STORET NO. - 3931 WORKING PAPER NO. 407. NTIS ACCESSION NO. PB-254 054/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	2535.60	3.35	4.8	23.100	9.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
192.	508.	0.5	0.208	0.159	3.070	3.900

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
5.5	**********	(4/26/73) P	(8/ 2/73) P	(10/10/73) N

SUMMARY OF PHYTOPLANKTON DATA

4/26/73 GENERA	COUNT	8/ 2/73 GENERA	COUNT	10/10/73 GENERA	COUNT
FLAGELLATES	708	CRYPTOMONAS	195	EUGLENA	1487
CRYPTOMONAS	490	STEPHANODISCUS	130	STEPHANODISCUS	178
STEPHANODISCUS	272	SYNEDRA	86	FLAGELLATES	155
SYNEDRA	91	MELOSIRA	43	CRYPTOMONAS	133
OSCILLATORIA	36	SCENEDESMUS	43	LEPOCINCLIS	111
OTHER	37	OTHER	87	OTHER	444
TOTAL	1634	TOTAL	584	TOTAL	2508

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	57755.	**********	195.	178990.	236940.
NITROGEN	163275.	**********	7390.	3134615.	3305280.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	153670.	35.	70.73
NITROGEN	3301920.	0.	986.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SCIOTO RIVER	18.100	1994.3	0.350	4.637	77.	1315.
MILL CREEK	4.200	463.6	0.273	3.380	53.	980.
EVERSOLE RUN	0.300	28.0	0.063	2.331	19.	735.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN OHIO

NAME - PLEASANT HILL RESERVOIR (EUTROPHIC)
COUNTY - ASHLAND, RICHLAND
STORET NO. - 3924 WORKING PAPER NO. 408. NTIS ACCESSION NO. PB-252 345/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	510.20	3.44	4.8	5.100	35.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
130.	329.	1.1	0.036	0.010	0.455	1.095

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/20/73) P	(7/30/73) P	(10/ 6/73) P
22.8	0.2			

SUMMARY OF PHYTOPLANKTON DATA

4/20/73 GENERA	COUNT	7/30/73 GENERA	COUNT	10/ 6/73 GENERA	COUNT
APHANOTHECE	8274	CRYPTOMONAS	1712	MELOSIRA	3053
STEPHANODISCUS	2600	CYCLOTELLA	1317	FLAGELLATES	1599
OSCILLATORIA	1894	FLAGELLATES	922	STEPHANODISCUS	1163
FLAGELLATES	1792	RAPHIDIOPSIS	494	SPIRAL CELLS	1066
SYNEDRA	1609	MELOSIRA	461	MESOSTIGMA	557
OTHER	1689	OTHER	2239	OTHER	3294
TOTAL	17858	TOTAL	7145	TOTAL	10732

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	8580.	**********	**********	3485.	12065.
NITROGEN	20695.	**********	**********	284740.	305435.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	9495.	21.	3.51
NITROGEN	267180.	13.	88.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CLEAR FK., MOHICAN RIVER	3.500	352.2	0.041	1.780	5.	534.
SWITZER CREEK	0.300	28.5	0.049	2.118	16.	719.
POSSUM RUN	0.400	38.1	0.025	1.340	8.	457.
SMOKY RUN	0.200	16.8	0.039	1.849	13.	638.
SLATER RUN	0.200	21.9	0.036	2.023	12.	712.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN OHIO

NAME - ROCKY FORK RESERVOIR (EUTROPHIC)
COUNTY - HIGHLAND
STORET NO. - 3932 WORKING PAPER NO. 409. NTIS ACCESSION NO. PB-253 240/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	295.30	8.17	5.1	3.400	142.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
154.	350.	0.7	0.067	0.010	0.790	1.270

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/28/73) P	(8/ 1/73) P	(10/ 9/73) P
38.0	2.5			

SUMMARY OF PHYTOPLANKTON DATA

4/28/73 GENERA	COUNT	8/ 1/73 GENERA	COUNT	10/ 9/73 GENERA	COUNT
MELOSIRA	24595	OSCILLATORIA	3639	LYNGBYA	7381
STEPHANODISCUS	8268	DACTYLOCOCCOPSIS	676	OSCILLATORIA	6250
CRYPTOMONAS	1459	CRYPTOMONAS	466	NITZSCHIA	3512
FLAGELLATES	625	MERISMOPEDIA	280	RAPHIDIOPSIS	2917
EUGLENA	347	CENTRIC DIATOM	280	MERISMOPEDIA	2024
OTHER	625	OTHER	793	OTHER	7499
TOTAL	35919	TOTAL	6134	TOTAL	29583

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	5305.	••••••••••	••••••••••	11475.	16780.
NITROGEN	15495.	••••••••••	••••••••••	248165.	263660.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	4945.	71.	2.05
NITROGEN	188435.	29.	32.3

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
ROCKY FORK	1.000	86.5	0.039	2.080	14.	780.
CLEAR CREEK	1.000	91.7	0.370	2.585	79.	839.
BLINCO BRANCH	0.200	15.2	0.099	2.500	36.	941.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN OHIO

NAME - LAKE SHAWNEE
COUNTY - GREENE
STORET NO. - 3933

(EUTROPHIC)

WORKING PAPER NO. 410. NTIS ACCESSION NO. PB-252 051/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	28.20	0.77	2.5	0.300	73.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
161.	422.	0.7	0.069	0.009	2.380	3.595

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
39.6	3.0	(4/28/73) P (8/ 1/73) P (10/ 9/73) P

SUMMARY OF PHYTOPLANKTON DATA

4/28/73 GENERA	COUNT	8/ 1/73 GENERA	COUNT	10/ 9/73 GENERA	COUNT
STEPHANODISCUS	45654	OSCILLATORIA	21734	RAPHIDIOPSIS	66849
FLAGELLATES	9519	RAPHIDIOPSIS	12419	SYNEDRA	3564
DACTYLOCOCCOPSIS	1571	SYNEDRA	2734	OSCILLATORIA	2970
CRYPTOMONAS	739	FLAGELLATES	1807	FLAGELLATES	1650
GYMNODINIUM	185	STEPHANODISCUS	834	ACHNANTHES	726
OTHER	278	OTHER	3430	OTHER	1846
TOTAL	57946	TOTAL	42958	TOTAL	77605

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	5.	455.	460.
NITROGEN	**********	**********	160.	37975.	38135.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	550.	LOSS	0.60
NITROGEN	30495.	20.	49.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CAESAR CREEK	0.200	24.3	0.044	4.292	15.	1419.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN OHIO

NAME - GRAND LAKE OF ST. MARYS (EUTROPHIC)
COUNTY - AUGLAIZE, MERCER
STORET NO. - 3927 WORKING PAPER NO. 411. NTIS ACCESSION NO. PB-253 241/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	290.40	44.52	3.0	2.900	1.6

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
97.	350.	0.4	0.148	0.014	0.200	2.295

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
79.2	••••••••••	(5/ 4/73) P (8/ 1/73) P AND N (10/11/73) N

SUMMARY OF PHYTOPLANKTON DATA

5/ 4/73 GENERA	COUNT	8/ 1/73 GENERA	COUNT	10/11/73 GENERA	COUNT
OSCILLATORIA	66768	LYNGBYA	19563	LYNGBYA	10036
FRAGILARIA	15396	ANABAENOPSIS	9350	ANACYSTIS(MICROCYSTIS)	2936
FLAGELLATES	7622	OSCILLATORIA	5589	DACTYLOCOCCOPSIS	2731
STEPHANODISCUS	6707	NITZSCHIA	3049	OSCILLATORIA	1911
SCENEDESMUS	3506	STEPHANODISCUS	2744	APHANIZOMENON	1638
OTHER	16464	OTHER	10874	OTHER	7099
TOTAL	116463	TOTAL	51169	TOTAL	26351

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	1445.	••••••••••	275.	19950.	21670.
NITROGEN	4340.	••••••••••	10325.	391790.	406455.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	15020.	31.	0.49
NITROGEN	237835.	41.	9.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
LITTLE CHICKASAW CREEK	0.200	18.2	0.216	4.476	45.	1502.
CHICKASAW CREEK	0.500	47.7	0.318	3.896	72.	1281.
BEAVER CREEK	0.500	52.8	0.278	3.915	56.	1305.
COLDWATER CREEK	0.500	49.7	0.532	4.414	129.	1341.
BARNES CREEK	0.100	9.3	0.226	4.504	68.	1537.
PRAIRIE CREEK	0.100	13.6	0.435	4.954	131.	1656.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN OHIO

NAME - TAPPAN RESERVOIR (EUTROPHIC)
COUNTY - HARRISON
STORET NO. - 3934 WORKING PAPER NO. 412. NTIS ACCESSION NO. PB-252 052/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	184.10	9.51	4.6	2.000	241.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
75.	626.	0.9	0.040	0.007	0.280	1.010

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/21/73) P	(7/31/73) P	(10/ 6/73) P
37.7	0.5			

SUMMARY OF PHYTOPLANKTON DATA

4/21/73 GENERA	COUNT	7/30/73 GENERA	COUNT	10/ 6/73 GENERA	COUNT
OSCILLATORIA	8327	OSCILLATORIA	217182	OSCILLATORIA	16750
FLAGELLATES	2988	RAPHIDIOPSIS	107567	RAPHIDIOPSIS	8878
SYNEDRA	2743	STEPHANODISCUS	589	MERISMOPEDIA	3374
CRYPTOMONAS	1225	SYNEDRA	359	NITZSCHIA	3314
CENTRIC DIATOM	686	ANABAENA	154	FLAGELLATES	2367
OTHER	635	OTHER	436	OTHER	6037
TOTAL	16604	TOTAL	326287	TOTAL	40720

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	35.	2695.	2730.
NITROGEN	**********	**********	1265.	87025.	88290.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	5550.	LOSS	0.29
NITROGEN	120520.	LOSS	9.3

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CLEAR CREEK	0.600	55.7	0.034	1.134	11.	421.
STANDINGSTONE FORK	0.300	28.0	0.059	1.143	20.	436.
BEAVERDAM RUN	0.100	9.8	0.041	1.273	14.	487.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN Pennsylvania

NAME - ALLEGHENY RESERVOIR (MESOTROPHIC--EUTROPHIC)
COUNTY - MCKEAN, WARREN, PA; CATTARAUGUS, NY
STORET NO. - 3641 WORKING PAPER NO. 147. NTIS ACCESSION NO. PB-247 227/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	5646.20	48.77	14.4	105.800	77.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
28.	131.	2.2	0.016	0.006	0.380	0.770

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/20/73) P	(7/27/73) P	(10/ 5/73) P
3.7	0.2			

SUMMARY OF PHYTOPLANKTON DATA

4/20/73 GENERA	COUNT	7/27/73 GENERA	COUNT	10/ 5/73 GENERA	COUNT
DINOBRYON	316	FLAGELLATES	572	FLAGELLATES	447
ASTERIONELLA	173	STEPHANODISCUS	177	APHANIZOMENON	429
SYNEDRA	90	CRYPTOMONAS	158	FRAGILARIA	71
CRYPTOMONAS	75	DINOBRYON	158	COCCOID CELLS	36
CYCLOTELLA	37	SYNEDRA	158		
OTHER	81	OTHER	847	OTHER	53
TOTAL	772	TOTAL	2070	TOTAL	1036

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	39690.	2750.	10.	119215.	161665.
NITROGEN	183870.	7135.	385.	2286830.	2478220.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	102530.	37.	3.31
NITROGEN	4461615.	LOSS	50.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SAWMILL RUN	0.500	27.7	0.015	0.432	8.	246.
BONE RUN	0.500	28.7	0.030	0.537	16.	295.
COLD SPRING CREEK	1.300	72.8	0.033	0.531	19.	303.
ALLEGHENY RIVER	76.200	4256.9	0.061	0.722	25.	355.
RED HOUSE BROOK	1.300	67.9	0.017	0.579	10.	342.
QUAKER RUN	1.300	67.9	0.010	0.486	6.	287.
LITTLE VALLEY CREEK	2.200	120.2	0.029	1.279	11.	723.
S.BR.STATE LINE RUN	0.300	11.7	0.012	1.303	10.	1011.
WILLOW CREEK	1.200	40.9	0.015	0.783	14.	734.
N. BRANCH SUGAR RUN	0.400	30.6	0.010	1.198	5.	566.
SUGAR RUN	0.800	62.2	0.011	1.153	4.	447.
CHAPPEL FORK	0.600	55.7	0.010	1.115	4.	377.
KINZUA CREEK	3.000	176.6	0.014	1.164	8.	633.

S. BR. KINZUA CREEK	1.400	101.0	0.062	1.552	8.	639.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN PENNSYLVANIA

NAME - BEAVER RUN RESERVOIR (MESOTROPHIC)
COUNTY - WESTMORELAND
STORET NO. - 4214 WORKING PAPER NO. 413. NTIS ACCESSION NO. PB-245 169/AS

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	110.60	4.55	7.3	3.500	110.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
15.	260.	2.9	0.009	0.006	0.835	0.965

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/23/73) P	(7/28/73) P	(10/ 5/73) P
5.2	0.1			

SUMMARY OF PHYTOPLANKTON DATA

4/23/73 GENERA	COUNT	7/28/73 GENERA	COUNT	10/ 5/73 GENERA	COUNT
FLAGELLATES	101	DINOBRYON	487	DINOBRYON	686
DINOBRYON	74	CYCLOTELLA	252	FLAGELLATES	281
COSCINODISCUS	46	CERATIUM	50	CRYPTOMONAS	62
TABELLARIA	18	GREEN FILAMENT	17	MELOSIRA	51
CRYPTOMONAS	18	FLAGELLATES	17	CYCLOTELLA	31
OTHER	45	OTHER	0	OTHER	22
TOTAL	302	TOTAL	823	TOTAL	1133

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	610.	**********	5.	7140.	7755.
NITROGEN	5640.	**********	45.	156540.	162225.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1325.	83.	1.70
NITROGEN	89850.	45.	35.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BEAVER RUN	1.400	49.5	0.173	2.339	105.	2182.
POLK RUN	0.500	8.2	0.123	1.644	140.	3423.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN PENNSYLVANIA

NAME - BELTZVILLE LAKE (MESOTROPHIC)
COUNTY - CARBON
STORET NO. - 4220 WORKING PAPER NO. 414. NTIS ACCESSION NO. PB-245 167/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	249.70	3.83	12.8	3.800	138.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
10.	46.	3.5	0.010	0.005	0.815	1.020

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/17/73) P	(7/24/73) P	(10/ 4/73) P
4.9	0.1			

SUMMARY OF PHYTOPLANKTON DATA

7/24/73 GENERA	COUNT	10/ 4/73 GENERA	COUNT
TABELLARIA	1115	CYCLOTELLA	618
ASTERIONELLA	678	DINOBRYON	598
GLOEOCYSTIS	241	FLAGELLATES	159
CRYPTOMONAS	153	CRUCIGENIA	20
MELOSIRA	131		
OTHER	197	OTHER	0
TOTAL	2515	TOTAL	1395

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	2105.	2105.
NITROGEN	**********	**********	**********	152350.	152350.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1490.	29.	0.55
NITROGEN	129130.	15.	39.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
POHOPOCO CREEK	2.700	129.2	0.016	1.462	11.	895.
PINE RUN	0.500	19.0	0.012	0.658	11.	578.

VI. MEAN NUTRIENT CONCENTRATIONS IN UNGAGED STREAMS

STREAM NAME	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)
WILD CREEK	0.014	0.635

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN PENNSYLVANIA

NAME - BLANCHARD RESERVOIR (EUTROPHIC)
COUNTY - CENTRE
STORET NO. - 4201 WORKING PAPER NO. 415. NTIS ACCESSION NO. PB-246 868/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	878.00	7.00	1.6	12.000	11.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
93.	289.	1.2	0.064	0.046	1.300	1.600

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
15.2	10.0	(4/13/73) P	(7/24/73) P	(10/ 2/73) P

SUMMARY OF PHYTOPLANKTON DATA

4/13/73 GENERA	COUNT	7/24/73 GENERA	COUNT	10/ 2/73 GENERA	COUNT
CRYPTOMONAS	212	OOCYSTIS	5439	MELOSIRA	424
FLAGELLATES	112	COELASTRUM	1389	FRAGILARIA	346
SYNEDRA	75	SCENEDESMUS	739	CRYPTOMONAS	26
FRAGILARIA	62	FRAGILARIA	347	FLAGELLATES	26
NAVICULA	49	FLAGELLATES	254	OOCYSTIS	19
OTHER	40	OTHER	906	OTHER	60
TOTAL	550	TOTAL	9074	TOTAL	901

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	64840.	**********	60.	2735.	67635.
NITROGEN	170715.	**********	2185.	222135.	395035.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	35745.	47.	9.66
NITROGEN	794465.	LOSS	56.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BALD EAGLE CREEK	10.300	686.3	0.183	2.626	3.*	245.*
LICK RUN	0.200	32.1	0.028	2.605	5.	465.
NITTANY CREEK	0.100	51.8	0.026	2.501	2.	178.
RULLIT RUN	0.100	15.8	0.016	0.776	2.	92.

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN PENNSYLVANIA

NAME - LAKE CANADOHTA (EUTROPHIC)
COUNTY - CRAWFORD
STORET NO. - 4221 WORKING PAPER NO. 416. NTIS ACCESSION NO. PB-246 566/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	20.40	0.69	8.8	0.800	100.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
38.	117.	1.6	0.020	0.005	0.130	0.550

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
19.2	0.2	(4/20/73) P	(7/27/73) P	(10/ 5/73) N

SUMMARY OF PHYTOPLANKTON DATA

4/20/73 GENERA	COUNT	7/27/73 GENERA	COUNT	10/ 5/73 GENERA	COUNT
ASTERIONELLA	28496	CRYPTOMONAS	469	FRAGILARIA	2342
DINOBRYON	2556	OSCILLATORIA	390	ANABAENA	215
SYNEDRA	301	FLAGELLATES	136	APHANOCAPSA	204
ANACYSTIS(MICROCYSTIS)	301	ANACYSTIS(MICROCYSTIS)	45	FLAGELLATES	124
FLAGELLATES	150	SPHAEROCYSTIS	45	BLUE-GREEN FILAMENT	113
OTHER	677	OTHER	98	OTHER	182
TOTAL	32481	TOTAL	1183	TOTAL	3180

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	15.	**********	140.	385.	540.
NITROGEN	45.	**********	5330.	21420.	26795.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	375.	31.	0.78
NITROGEN	33530.	LOSS	38.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
WEST SHREVE RUN	0.200	10.0	0.038	1.416	24.	893.
EAST SHREVE RUN	0.200	7.7	0.024	1.443	13.	1247.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN PENNSYLVANIA

NAME - CONEWAGO LAKE(PINCHOT) (EUTROPHIC)
COUNTY - YORK
STORET NO. - 4226 WORKING PAPER NO. 423. NTIS ACCESSION NO. PB-247 210/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	45.60	1.38	2.7	0.800	72.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
49.	132.	1.2	0.027	0.008	0.245	0.960

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME (4/13/73) P	(7/24/73) P	(10/ 2/73) P
14.0	0.2			

SUMMARY OF PHYTOPLANKTON DATA

4/13/73 GENERA	COUNT	7/24/73 GENERA	COUNT	10/ 2/73 GENERA	COUNT
DINOBRYON	3750	ARTHROSPIRA	3551	FLAGELLATES	601
FLAGELLATES	2720	MELOSIRA	383	ANABAENA	565
CRYPTOMONAS	555	FLAGELLATES	383	OOCYSTIS	209
SCHROEDERIA	370	CLOSTERIUM	230	CYCLOTELLA	49
FRAGILARIA	370	TRACHELOMONAS	179	COELASTRUM	49
OTHER	370	OTHER	485	OTHER	221
TOTAL	8135	TOTAL	5211	TOTAL	1694

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	535.	535.
NITROGEN	**********	**********	45.	23625.	23670.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	465.	13.	0.39
NITROGEN	19180.	19.	17.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BEAVER CREEK	0.400	13.4	0.027	1.067	16.	715.
UNNAMED STREAM (B1)	0.020	3.5	0.028	1.006	6.	220.
UNNAMED STREAM (C1)	0.100	6.7	0.022	0.881	9.	396.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN PENNSYLVANIA

NAME - CONNEAUT LAKE (EUTROPHIC)
COUNTY - CRAWFORD
STORET NO. - 4204 WORKING PAPER NO. 417. NTIS ACCESSION NO. PB-246 626/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	69.70	3.78	7.3	2.600	106.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
66.	185.	2.5	0.023	0.007	0.185	0.705

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/21/73) P	(7/27/73) N	(10/ 5/73) N
7.6	**********			

SUMMARY OF PHYTOPLANKTON DATA

4/21/73 GENERA	COUNT	7/27/73 GENERA	COUNT	10/ 5/73 GENERA	COUNT
FLAGELLATES	335	ANABAENA	228	ANABAENA	145
ASTERIONELLA	220	STEPHANODISCUS	178	STEPHANODISCUS	105
CYCLOTELLA	176	CRYPTOMONAS	152	FLAGELLATES	105
STEPHANODISCUS	132	DINOBRYON	127	CRYPTOMONAS	53
FRAGILARIA	97	FLAGELLATES	102	CERATIUM	26
OTHER	27	OTHER	204	OTHER	79
TOTAL	987	TOTAL	991	TOTAL	513

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	1925.	1925.
NITROGEN	**********	**********	**********	51925.	51925.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1345.	30.	0.51
NITROGEN	65515.	LOSS	13.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UNNAMED STREAM (B1)	0.100	4.6	0.034	0.615	22.	502.
UNNAMED STREAM (D1)	0.500	20.8	0.052	1.115	31.	860.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN PENNSYLVANIA

NAME - GREENLANE RESERVOIR (EUTROPHIC)
COUNTY - MONTGOMERY
STORET NO. - 4207 WORKING PAPER NO. 418. NTIS ACCESSION NO. PB-245 166/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	182.20	3.29	5.0	4.900	50.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
41.	148.	1.0	0.066	0.020	1.475	1.730

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
24.0	15.7	(4/17/73) P	(7/24/73) P	(10/ 3/73) P

SUMMARY OF PHYTOPLANKTON DATA

4/17/73 GENERA	COUNT	7/24/73 GENERA	COUNT	10/ 3/73 GENERA	COUNT
STEPHANODISCUS	13676	APHANIZOMENON	1967	FRAGILARIA	1838
CHLAMYDOMONAS	1091	MELOSIRA	265	CRYPTOMONAS	1171
MELOSIRA	196	FRAGILARIA	155	MELOSIRA	689
CRYPTOMONAS	140	OOCYSTIS	133	SCENEDESMUS	666
SCENEDESMUS	84	ANACYSTIS(MICROCYSTIS)	88	COELASTRUM	459
OTHER	46	OTHER	154	OTHER	1034
TOTAL	15233	TOTAL	2762	TOTAL	5857

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	11885.	13610.	5.	16715.	42215.
NITROGEN	34155.	40810.	105.	474950.	550020.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	9225.	78.	12.83
NITROGEN	278470.	49.	167.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
PERKIOMEN CREEK	2.600	97.6	0.088	2.944	93.*	2635.*
R. BR.. PERKIOMEN CREEK	1.800	56.7	0.119	2.636	93.	2635.

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN PENNSYLVANIA

NAME - HARVEYS LAKE (MESOTROPHIC)
COUNTY - LUZERNE
STORET NO. - 4222 WORKING PAPER NO. 419. NTIS ACCESSION NO. PB-247 209/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	17.30	2.67	11.0	0.600	1.6

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
20.	91.	4.1	0.015	0.006	0.160	0.415

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
6.0	0.2	(4/12/73) P	(7/23/73) P	(10/ 2/73) P

SUMMARY OF PHYTOPLANKTON DATA

4/12/73 GENERA	COUNT	7/23/73 GENERA	COUNT	10/ 2/73 GENERA	COUNT
ASTERIONELLA	2097	APHANIZOMENON	299	CRYPTOMONAS	75
FLAGELLATES	198	FLAGELLATES	193	COELOSPHAERIUM	50
CRYPTOMONAS	63	CRYPTOMONAS	140	ANABAENA	25
FRAGILARIA	31	ANACYSTIS(MICROCYSTIS)	88	CERATIUM	25
CYCLOTELLA	21	CERATIUM	88	GLOEOCYSTIS	25
OTHER	20	OTHER	158	OTHER	37
TOTAL	2430	TOTAL	966	TOTAL	237

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	115.	600.	715.
NITROGEN	**********	**********	4265.	14235.	18500.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	205.	71.	0.27
NITROGEN	15960.	14.	6.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UNNAMED CREEK (B1)	0.020	1.4	0.064	0.894	21.	339.
UNNAMED CREEK (C1)	0.100	2.8	0.073	1.188	46.	848.
UNNAMED CREEK (D1)	0.100	2.3	0.063	1.265	43.	1059.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN PENNSYLVANIA

NAME - INDIAN LAKE (MESOTROPHIC)
COUNTY - SOMERSET
STORET NO. - 4223 WORKING PAPER NO. 420. NTIS ACCESSION NO. PB-245 165/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	36.10	3.04	4.3	0.500	303.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
10.	104.	2.5	0.008	0.005	0.520	0.750

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
5.2	0.1	(4/23/73) P	(7/25/73) P	(10/ 4/73) P

SUMMARY OF PHYTOPLANKTON DATA

4/23/73 GENERA	COUNT	7/25/73 GENERA	COUNT	10/ 4/73 GENERA	COUNT
CHRYSOPHYTAN CELLS	100	CYCLOTELLA	949	CYCLOTELLA	1559
DINOBRYON	60	GREEN CELLS	161	FLAGELLATES	219
GYMNODINIUM	33	FLAGELLATES	80	ANKISTRODESMUS	146
SYNEDRA	20	PERIDINIUM	48	OOCYSTIS	87
CYCLOTELLA	13	SYNEDRA	16	XANTHIDIUM	58
OTHER	7	OTHER	16	OTHER	131
TOTAL	233	TOTAL	1270	TOTAL	2200

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	25.	**********	60.	245.	330.
NITROGEN	140.	**********	2345.	26300.	28785.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	175.	47.	0.11
NITROGEN	18920.	34.	9.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CLEAR RUN	0.100	8.4	0.012	1.460	5.	548.

COMPENDIUM OF NATIONAL EUTHOPHICATION SURVEY LAKES IN PENNSYLVANIA

NAME - LAKE NAOMI (MESOTROPHIC)
COUNTY - MONROE
STORET NO. - 4224 WORKING PAPER NO. 421; NTIS ACCESSION NO. PB-245 168/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	49.50	2.02	8.9	1.000	21.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
10.	41.	1.4	0.014	0.005	0.135	0.415

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
5.5	0.1	(4/17/73) P	(7/23/73) P	(10/ 3/73) P

SUMMARY OF PHYTOPLANKTON DATA

7/23/73 GENERA	COUNT	10/ 3/73 GENERA	COUNT
SYNEDRA	1784	FLAGELLATES	1080
MELOSIRA	758	PERIDINIUM	163
GLENODINIUM	558	CRYPTOMONAS	131
ASTERIONELLA	312	GREEN CELLS .	65
ANKYRODESMUS	223	ASTERIONELLA	33
OTHER	447	OTHER	99
TOTAL	4082	TOTAL	1571

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	30.	**********	15.	515.	560.
NITROGEN	85.	**********	640.	20940.	21665.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	540.	4.	0.28
NITROGEN	17695.	18.	10.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UPPER TUNKHANNUCK CR	0.700	3.0	0.016	0.648	10.	395.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN PENNSYLVANIA

NAME - LAKE ONTELAUNEE (EUTROPHIC)
COUNTY - BERKS
STORET NO. - 4225 WORKING PAPER NO. 422. NTIS ACCESSION NO. PB-251 120/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	559.40	4.38	3.4	11.800	14.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
70.	207.	0.7	0.040	0.011	2.150	2.700

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
11.8	4.7	(4/13/73) P	(7/24/73) P	(10/ 3/73) P

SUMMARY OF PHYTOPLANKTON DATA

4/13/73 GENERA	COUNT	7/24/73 GENERA	COUNT	10/ 3/73 GENERA	COUNT
STEPHANODISCUS	680	SCENEDESMUS	181	MELOSIRA	4698
ASTERIONELLA	107	COELASTRUM	140	FRAGILARIA	3085
CRYPTOMONAS	67	GLOEOCYSTIS	131	PEDIASTRUM	111
MELOSIRA	67	OOCYSTIS	74	GREEN FILAMENT	91
FLAGELLATES	67	MERISMOPEDIA	49	OOCYSTIS	81
OTHER	89	OTHER	114	OTHER	94
TOTAL	1077	TOTAL	689	TOTAL	8160

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	3620.	**********	30.	17305.	20955.
NITROGEN	11035.	**********	1170.	1060920.	1073125.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	18255.	13.	4.78
NITROGEN	1254715.	LOSS	245.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
MAIDEN CREEK	8.200	404.0	0.076	3.005	39.	1931.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN PENNSYLVANIA

NAME - POCONO LAKE (MESOTROPHIC)
COUNTY - MONROE
STORET NO. - 4227 WORKING PAPER NO. 424. NTIS ACCESSION NO. PB-245 135/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	193.70	3.04	3.7	4.900	37.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
10.	32.	1.5	0.024	0.007	0.130	0.495

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/17/73) N	(7/23/73) P	(10/ 3/73) P
5.0	**********			

SUMMARY OF PHYTOPLANKTON DATA

4/13/73 GENERA	COUNT	7/23/73 GENERA	COUNT	10/ 3/73 GENERA	COUNT
DINOBRYON	247	MELOSIRA	519	MELOSIRA	649
FLAGELLATES	226	CRYPTOMONAS	294	FLAGELLATES	325
TABELLARIA	54	ASTERIONELLA	286	CYCLOTELLA	72
ASTERIONELLA	21	SYNEDRA	263	SCENEDESMUS	54
MELOSIRA	11	FLAGELLATES	225	NITZSCHIA	36
OTHER	55	OTHER	0	OTHER	127
TOTAL	614	TOTAL	1587	TOTAL	1263

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	1055.	**********	15.	1750.	2820.
NITROGEN	5095.	**********	565.	102060.	107720.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	2535.	10.	0.93
NITROGEN	78400.	27.	35.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
TOBYHANNA CREEK	2.400	79.8	0.020	0.613	5.	525.
WAGNER RUN	0.300	14.0	0.020	0.774	14.	494.
UPPER TUNKHANNOCK CREEK	1.400	65.3	0.014	0.804	10.	526.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN PENNSYLVANIA

NAME - PYMATUNING RESERVOIR (EUTROPHIC)
COUNTY - CRAWFORD, PA: ASHTABULA, OH
STORET NO. - 4213 WORKING PAPER NO. 425, NTIS ACCESSION NO. PB-247 945/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	398.90	66.45	3.7	5.300	1.4

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
36.	150.	0.8	0.070	0.008	0.180	1.290

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/21/73) P	(7/31/73) P	(10/ 6/73) N
56.3	7.1			

SUMMARY OF PHYTOPLANKTON DATA

4/21/73 GENERA	COUNT	7/31/73 GENERA	COUNT	10/ 6/73 GENERA	COUNT
APHANIZOMENON	6168	LYNGBYA	7724	LYNGBYA	3535
FLAGELLATES	2821	STEPHANODISCUS	1657	OSCILLATORIA	1964
SCENEDESMUS	640	NITZSCHIA	1330	ANABAENA	1375
CRYPTOMONAS	489	ANABAENA	1038	MELOSIRA	1257
SYNEDRA	451	SCENEDESMUS	1005	FLAGELLATES	1257
OTHER	2181	OTHER	3571	OTHER	5422
TOTAL	12750	TOTAL	16325	TOTAL	14810

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	3215.	**********	15.	12285.	15515.
NITROGEN	8050.	**********	650.	258620.	267320.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	7675.	51.	0.23
NITROGEN	203450.	24.	4.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
MCMICHAEL CREEK	0.200	16.7	0.047	1.872	10.	346.
BLACK CREEK	0.100	14.6	0.086	1.558	10.	235.
UNNAMED CREEK (01)	0.100	8.8	1.338	3.012	247.	519.
GRAVEL RUN	0.100	14.0	0.069	1.550	18.	448.
PADEN CREEK	0.600	43.5	0.039	1.302	17.	622.
LINESVILLE CREEK	0.400	25.2	0.107	1.576	49.	778.
BENNETT RUN	0.200	18.1	0.030	1.798	10.	722.
UNNAMED CREEK (01)	0.100	2.7	0.060	1.541	46.	1170.
SHENANGO RIVER	0.200	**********	0.038	1.303	**********	**********

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN PENNSYLVANIA

NAME - SHENANGO RIVER RESERVOIR (EUTROPHIC)
COUNTY - MERCER
STORET NO. - 4216 WORKING PAPER NO. 426. NTIS ACCESSION NO. PB-246 856/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	1512.60	14.41	2.5	17.000	21.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
60.	200.	0.9	0.058	0.008	0.340	0.990

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/20/73) P	(7/31/73) P	(10/ 8/73) P
26.8	5.7			

SUMMARY OF PHYTOPLANKTON DATA

4/20/73 GENERA	COUNT	7/31/73 GENERA	COUNT
MELOSIRA	1706	ANABAENA	2071
ASTERIONELLA	1389	APHANIZOMENON	323
FLAGELLATES	198	STEPHANODISCUS	323
ANKISTRODESMUS	99	MELOSIRA	296
SYNEDRA	79	FLAGELLATES	215
OTHER	120	OTHER	885
TOTAL	3591	TOTAL	4113

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	19295.	1975.	5.	35275.	56550.
NITROGEN	42380.	4990.	70.	712755.	760195.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	42060.	26.	3.92
NITROGEN	894835.	LOSS	52.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SHENANGO RIVER	12.000	929.8	0.114	1.405	24.	524.
PYMATUNING CREEK	3.200	385.9	0.121	1.464	27.	399.
BOOTH RUN	0.200	27.2	0.014	1.124	3.	258.
BRUSH RUN	0.100	14.2	0.278	1.736	36.	247.
LACKAWANNOCK	0.200	23.3	0.092	1.186	30.	400.
DALEY RUN	0.100	8.1	0.041	2.092	9.	496.
MAGARGEE RUN	0.100	23.5	0.030	1.619	5.	283.
GOLDEN RUN	0.100	11.7	0.037	1.559	5.	251.
PINE HOLLOW RUN	0.100	11.3	0.115	1.100	18.	192.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN PENNSYLVANIA

NAME - STILLWATER LAKE (MESOTROPHIC)
COUNTY - MONROE
STORET NO. - 4228 WORKING PAPER NO. 427. NTIS ACCESSION NO. PB-245 170/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	35.00	1.41	1.0	0.700	23.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
10.	33.	1.3	0.015	0.004	0.180	0.630

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
18.2	0.1	(4/17/73) P	(7/23/73) P	(10/ 3/73) P

SUMMARY OF PHYTOPLANKTON DATA

7/23/73 GENERA	COUNT	10/ 3/73 GENERA	COUNT
PERIDINIUM	391	CHLORELLA	5236
COCCOID CHLOROPHYTA CELL	112	FLAGELLATES	237
CRYPTOMONAS	74	MELOSIRA	79
SYNEDRA	56	EUNOTIA	68
FLAGELLATES	37	GLENODINIUM	45
OTHER	76	OTHER	112
TOTAL	746	TOTAL	5777

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	5.	350.	355.
NITROGEN	**********	**********	105.	19055.	19160.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	355.	0.	0.25
NITROGEN	13820.	28.	13.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UNNAMED STREAM (B1)	0.200	8.9	0.021	1.044	12.	583.
HAWKEY RUN	0.300	14.9	0.011	0.738	8.	479.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN PENNSYLVANIA

NAME - LAKE WALLENPAUPACK (MESOTROPHIC)
COUNTY - PIKE, WAYNE
STORET NO. - 4229 WORKING PAPER NO. 428. NTIS ACCESSION NO. PB-247 975/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	590.50	23.31	8.5	10.000	229.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
16.	54.	2.7	0.015	0.006	0.250	0.550

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
9.6	0.1	(4/12/73) P	(7/23/73) P	(10/ 3/73) N

SUMMARY OF PHYTOPLANKTON DATA

4/12/73 GENERA	COUNT	7/23/73 GENERA	COUNT	10/ 3/73 GENERA	COUNT
ASTERIONELLA	2447	CHRYSOPHYCEAN FLAGELLATE	1250	ANABAENA	174
FLAGELLATES	256	APHANIZOMENON	245	FLAGELLATES	144
DINOBRYON	181	TABELLARIA	217	FRAGILARIA	123
CRYPTOMONAS	115	ANABAENA	82	APHANIZOMENON	72
MERIDION	33	CRYPTOMONAS	54	ASTERIONELLA	72
OTHER	58	OTHER	135	OTHER	154
TOTAL	3090	TOTAL	1983	TOTAL	739

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	620.	**********	245.	7465.	8330.
NITROGEN	1260.	**********	9140.	289870.	300270.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	6940.	17.	0.36
NITROGEN	239080.	20.	12.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
WALLENPAUPACK CREEK	4.800	391.1	0.025	1.130	10.	438.
MILL BROOK	0.300	12.4	0.020	0.744	15.	540.
KLEINHANS CREEK	0.200	10.6	0.020	1.177	10.	568.
UNNAMED CREEK (D1)	0.060	3.8	0.023	1.081	13.	574.
ARIEL CREEK	0.500	40.4	0.030	1.122	11.	446.
PURDY CREEK	0.400	21.2	0.029	0.966	16.	527.
UNNAMED CREEK (G1)	0.050	4.4	0.965	2.374	209.	706.
SPINNER BROOK	0.100	7.1	0.025	1.014	11.	457.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN SOUTH CAROLINA

NAME - LAKE WILLIAM C. BOWEN (MESO-EUTROPHIC)
COUNTY - SPARTANBURG
STORET NO. - 4516 WORKING PAPER NO. 429. NTIS ACCESSION NO. PB-259 163/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	212.60	6.48	******	3.160	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
15.	50.	1.0	0.022	0.007	0.360	0.545

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
3.9	0.1	(3/29/73) P	(7/11/73) P	(9/20/73) P

SUMMARY OF PHYTOPLANKTON DATA

3/29/73 GENERA	COUNT	7/11/73 GENERA	COUNT	9/20/73 GENERA	COUNT
CRYPTOMONAS	223	CYCLOTELLA	1383	MELOSIRA	592
MELOSIRA	81	MELOSIRA	829	CYCLOTELLA	464
MOUGEOTIA	81	MERISMOPEDIA	275	GLOEOTHECE	186
ASTERIONELLA	20	FLAGELLATES	138	MERISMOPEDIA	93
		GLOEOTHECE	115	GOMPHOSPHAERIA	58
OTHER	0	OTHER	279	OTHER	173
TOTAL	405	TOTAL	3019	TOTAL	1566

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	245.	**********	**********	2285.	2530.
NITROGEN	310.	**********	**********	79940.	80250.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	2580.	LOSS	0.39
NITROGEN	63910.	20.	12.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
PACOLET RIVER	2.450	145.0	0.027	0.801	12.	421.
ALEXANDER CREEK	0.200	13.9	0.020	0.535	1.	179.
UNNAMED CREEK (C1)	0.100	10.0	0.020	0.736	6.	220.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN SOUTH CAROLINA

NAME - FISHING CREEK RES (EUTROPHIC)
COUNTY - CHESTER, LANCASTER
STORET NO. - 4503 WORKING PAPER NO. 430. NTIS ACCESSION NO. PB-260 511/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	9867.90	13.64	5.4	133.074	6.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
20.	104.	0.4	0.143	0.051	0.535	0.845

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/ 2/73)	(7/ 6/73)	(9/22/73)
2.8	6.5	P	N	N

SUMMARY OF PHYTOPLANKTON DATA

4/ 2/73 GENERA	COUNT	7/ 6/73 GENERA	COUNT	9/22/73 GENERA	COUNT
CRYPTOMONAS	115	MELOSIRA	119	SCENEDESMUS	168
MELOSIRA	86	FLAGELLATES	92	MELOSIRA	105
APHANIZOMENON	57	NITZSCHIA	79	CYCLOTELLA	96
NITZSCHIA	29	MERISMOPEDIA	39	NITZSCHIA	40
		SCENEDESMUS	39	CRYPTOMONAS	40
OTHER	8	OTHER	287	OTHER	202
TOTAL	287	TOTAL	655	TOTAL	651

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	538500.	**********	**********	184810.	723310.
NITROGEN	1595320.	**********	**********	5053855.	6649175.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	662045.	8.	53.03
NITROGEN	6736480.	LOSS	487.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CATAWBA RIVER	127.620	9375.8	0.166	1.586	15.	510.
UNNAMED CREEK (B1)	0.054	4.8	0.157	1.485	6.	385.
CANE CREEK	4.440	388.5	0.434	2.097	99.	589.
RUM CREEK	0.270	24.3	0.133	0.979	34.	356.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN SOUTH CAROLINA

NAME - LAKE GREENWOOD (EUTROPHIC)
COUNTY - GREENWOOD, LAURENS, NEWBERRY
STORET NO. - 4504 WORKING PAPER NO. 431. NTIS ACCESSION NO. PB-260 509/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	2978.40	46.14	6.8	49.460	74.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
19.	58.	0.9	0.061	0.011	0.470	0.750

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(3/28/73) P	(7/ 9/73) P	(9/18/73) P
8.2	**********			

SUMMARY OF PHYTOPLANKTON DATA

3/28/73		7/ 9/73		9/18/73	
GENERA	COUNT	GENERA	COUNT	GENERA	COUNT
CRYPTOMONAS	273	LYNGBYA	2456	RAPHIDIOPSIS	9263
CENTRIC DIATOM	182	CYCLOTELLA	665	DACTYLOCOCCOPSIS	1693
MELOSIRA	137	NITZSCHIA	462	OSCILLATORIA	796
OSCILLATORIA	68	FLAGELLATES	433	ANABAENOPSIS	697
MALLOMONAS	46	RAPHIDIOPSIS	433	LYNGBYA	399
OTHER	205	OTHER	2429	OTHER	1594
TOTAL	911	TOTAL	6878	TOTAL	14442

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	345640.	**********	**********	55110.	400750.
NITROGEN	940355.	**********	**********	1415175.	2355530.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	90815.	77.	8.69
NITROGEN	1448195.	39.	51.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SALUDA RIVER	28.040	1471.1	0.067	1.259	14.	665.
TURKEY CREEK	1.670	117.8	0.053	0.577	9.	217.
REEDY RIVER	9.970	655.3	0.360	2.022	24.	353.
RABON CREEK	4.630	326.3	0.047	0.696	21.	313.
LONG LICK BRANCH	0.290	20.3	0.058	0.417	27.	193.
CANE CREEK	0.860	60.3	0.078	0.684	36.	313.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN SOUTH CAROLINA

NAME - LAKE HARTWELL (MESO-EUTROPHIC)
COUNTY - ANDERSON, OCONEE, PICKENS, SC; FRANKLIN, HART, STEPHENS, GA
STORET NO. - 4505 WORKING PAPER NO. 432, NTIS ACCESSION NO. PB-261 963/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	5407.90	226.43	13.9	119.759	304.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
14.	50.	2.0	0.013	0.004	0.130	0.400

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(6/26/73) P	(9/15/73) P	(11/13/73) P
6.2	0.1 - 0.5 (4)			

SUMMARY OF PHYTOPLANKTON DATA

6/26/73 GENERA	COUNT	9/15/73 GENERA	COUNT	11/13/73 GENERA	COUNT
TABELLARIA	507	LYNGBYA	1045	MELOSIRA	349
MELOSIRA	244	STAURASTRUM	101	TABELLARIA	129
FLAGELLATES	150	FLAGELLATES	101	CYCLOTELLA	90
CYCLOTELLA	94	ANABAENOPSIS	90	SCENEDESMUS	38
OSCILLATORIA	38	SYNEDRA	67	FLAGELLATES	26
OTHER	234	OTHER	350	OTHER	169
TOTAL	1267	TOTAL	1754	TOTAL	801

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	57450.	25860.	1540.	102365.	187715.
NITROGEN	140560.	1255.	54450.	2723845.	2920110.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	33850.	82.	0.83
NITROGEN	3787435.	LOSS	12.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SENECA RIVER	32.440	1178.4	0.017	0.644	15.	559.
SIX & TWENTY CREEK	1.070	76.4	0.030	0.933	13.	412.
THREE & TWENTY CREEK	2.990	214.2	0.077	1.092	31.	477.
EIGHTEENMILE CREEK	2.130	142.7	0.147	1.075	13.	332.
TWELVEMILE CREEK	6.030	354.8	0.144	1.010	58.	492.
SIXMILE CREEK	0.610	36.0	0.028	0.852	15.	455.
MARTIN CREEK	0.190	13.0	0.034	1.175	15.	530.
CONEROSS CREEK	3.190	190.4	0.105	0.842	5.	292.
SENECA CREEK	0.200	10.3	0.427	1.129	50.	382.
SHOAL CREEK	0.980	70.2	0.047	1.240	21.	531.
EASTANOLLEE CREEK	1.040	63.7	1.089	1.569	25.	614.
TUCCOA CREEK	1.280	68.4	0.117	0.920	65.	532.
TUGALOO RIVER	38.640	1367.5	0.025	0.430	14.	383.

CHAUGA RIVER	6.030	233.6	0.017	0.715	14.	582.
CHOESTOEA CREEK	0.600	37.0	0.040	1.079	16.*	514.*

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN SOUTH CAROLINA

NAME - LAKE KEOWEE (OLIGO-MESOTROPHIC)
COUNTY - OCONEE, PICKENS
STORET NO. - 4513 WORKING PAPER NO. 433. NTIS ACCESSION NO. PB-260 500/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	1137.00	69.41	15.2	31.520	1.1

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
13.	32.	3.3	0.008	0.003	0.170	0.320

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
2.8	0.1	(6/25/73) P	(9/17/73) P	(11/13/73) P

SUMMARY OF PHYTOPLANKTON DATA

6/25/73 GENERA	COUNT	9/17/73 GENERA	COUNT	11/13/73 GENERA	COUNT
MELOSIRA	915	ROYA	231	CRUCIGENIA	17
CYCLOTELLA	730	MELOSIRA	94	MELOSIRA	13
DINOFLAGELLATES	74	GLOEOTHECE	73	CYCLOTELLA	9
FLAGELLATES	49	LYNGBYA	42	SCENEDESMUS	9
MERISMOPEDIA	49	OSCILLATORIA	31	COELASTRUM	4
OTHER	125	OTHER	196	OTHER	8
TOTAL	1942	TOTAL	667	TOTAL	60

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	1475.	**********	**********	20150.	21625.
NITROGEN	4905.	**********	**********	405410.	410315.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	16900.	22.	0.31
NITROGEN	452275.	LOSS	5.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CANE CREEK	1.970	80.3	0.043	0.552	15.	366.
LITTLE RIVER	4.570	184.4	0.022	0.402	18.	314.
KEOWEE RIVER	19.100	562.0	0.010	0.450	18.*	312.*
EASTATOE CREEK	2.750	112.4	0.024	0.275	19.	212.
CEDAR CREEK	0.480	19.9	0.025	0.312	19.	237.
LITTLE EASTATOE CREEK	0.760	31.1	0.019	0.628	15.	484.

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN SOUTH CAROLINA

NAME - LAKE MARION (EUTROPHIC)
COUNTY - BERKELEY, CALHOUN, CLARENDON, ORANGEBURG, SUMTER
STORET NO. - 4506 WORKING PAPER NO. 434, NTIS ACCESSION NO. PB-261 962/AH

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	38073.00	447.59	4.0	473.224	44.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
14.	72.	0.8	0.055	0.010	0.280	0.740

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
8.7	3.2 - 5.0 (3)	(3/26/73) P	(7/10/73) P	(9/22/73) P

SUMMARY OF PHYTOPLANKTON DATA

3/26/73 GENERA	COUNT	7/10/73 GENERA	COUNT	9/22/73 GENERA	COUNT
MELOSIRA	1388	LYNGBYA	1154	DACTYLOCOCCOPSIS	1485
FLAGELLATES	505	MELOSIRA	1010	FLAGELLATES	764
PENNATE DIATOMS	473	DACTYLOCOCCOPSIS	830	LYNGBYA	674
CRYPTOMONAS	189	FLAGELLATES	397	RAPHIDIOPSIS	467
DACTYLOCOCCOPSIS	178	NITZSCHIA	397	ANABAENOPSIS	339
OTHER	705	OTHER	1982	OTHER	2122
TOTAL	3438	TOTAL	5770	TOTAL	5856

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	711285.	**********	1900.	869625.	1582810.
NITROGEN	3184140.	**********	7145.	10438590.	13629875.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	682610.	57.	3.54
NITROGEN	10498300.	23.	30.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UNNAMED CREEK (C1)	0.094	11.2	0.097	1.115	25.	288.
BIG POPLAR CREEK	0.330	38.3	0.093	0.776	22.*	336.*
HALFWAY SWAMP CREEK	1.480	169.4	0.084	0.759	13.	177.
WAHLEY CREEK	0.260	30.6	0.064	1.432	17.	382.
CONGAREE RIVER	279.230	21937.3	0.107	0.752	28.	196.
WATEREE RIVER	184.010	14581.7	0.107	1.210	16.	364.
SPRING GROVE CREEK	0.360	32.9	0.084	1.137	28.	383.
JACKS CREEK	0.490	44.3	0.046	0.993	16.	291.
TAWCAW CREEK	0.410	37.8	0.281	1.724	50.	449.

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN SOUTH CAROLINA

NAME - LAKE MOULTRIE (EUTROPHIC)
COUNTY - BERKELEY
STORET NO. - 4512 WORKING PAPER NO. 435. NTIS ACCESSION NO. PB-260 893/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
NATURAL	38850.00	263.05	5.7	414.016	42.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
17.	72.	1.1	0.026	0.006	0.200	0.625

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(3/26/73) P	(7/ 9/73) P	(9/21/73) P
8.8	2.4 - 3.0 (2)			

SUMMARY OF PHYTOPLANKTON DATA

3/27/73 GENERA	COUNT	7/ 9/73 GENERA	COUNT	9/21/73 GENERA	COUNT
FLAGELLATES	1205	MELOSIRA	4812	DACTYLOCOCCOPSIS	7280
CYCLOTELLA	829	LYNGBYA	3609	CHROOCOCCUS	6850
SYNEDRA	339	SCENEDESMUS	740	MELOSIRA	1540
STICHOCOCCUS	282	DACTYLOCOCCOPSIS	555	PENNATE DIATOMS	770
RAPHIDIOPSIS	245	FLAGELLATES	555	SCENEDESMUS	630
OTHER	885	OTHER	3332	OTHER	630
TOTAL	3785	TOTAL	13603	TOTAL	17700

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	264310.	**********	60.	343750.	608120.
NITROGEN	2065825.	**********	2150.	7216530.	9284505.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	392415.	35.	2.31
NITROGEN	10270315.	LOSS	35.3

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
DIVERSION CANAL	409.390	38073.0	0.041	0.645	9.	177.
SANTEE OLD CANAL	0.170	19.1	0.049	0.513	14.	141.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN SOUTH CAROLINA

NAME - LAKE MURRAY (MESOTROPHIC--EUTROPHIC)
COUNTY - FAIRFIELD, LEXINGTON, NEWBERRY, SALUDA, RICHLAND
STORET NO. - 4507 WORKING PAPER NO. 436, NTIS ACCESSION NO. PB-260 517/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	6268.00	205.58	12.7	86.660	348.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
18.	63.	1.9	0.024	0.007	0.260	0.540

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
6.4	0.3 - 0.6 (2)	(3/26/73) P	(7/ 9/73) P	(9/22/73) P

SUMMARY OF PHYTOPLANKTON DATA

3/26/73 GENERA	COUNT	7/ 7/73 GENERA	COUNT	9/22/73 GENERA	COUNT
MELOSIRA	669	NITZSCHIA	2429	DACTYLOCOCCOPSIS	1321
FLAGELLATES	669	ANABAENA	1404	RAPHIDIOPSIS	1148
CRYPTOMONAS	278	CYCLOTELLA	1350	LYNGBYA	976
FRAGILARIA	138	LYNGBYA	1026	ANABAENA	345
STEPHANODISCUS	106	SYNEDRA	756	AMPHIPLEURA	86
OTHER	351	OTHER	4263	OTHER	1234
TOTAL	2211	TOTAL	11228	TOTAL	5110

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	178375.	**********	1425.	117305.	297105.
NITROGEN	855720.	**********	53360.	1864640	2773720.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	83275.	72.	1.45
NITROGEN	1927285.	31.	13.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SALUDA RIVER	61.820	4325.3	0.087	0.847	9.	206.
HORSE CREEK	0.290	20.9	0.037	0.733	17.	335.
HOLLOW CREEK	0.630	44.8	0.063	0.641	29.	291.
CLOUDS CREEK	3.390	238.8	0.122	1.020	35.	396.
RICHLAND CREEK	0.710	49.7	0.057	0.938	26.	429.
LITTLE SALUDA RIVER	4.030	284.1	0.598	2.073	89.	650.
BIG CREEK	1.810	127.4	0.110	1.158	50.	529.
INDIAN CREEK	0.340	24.0	0.079	0.920	36.	418.
HUSH RIVER	4.280	303.0	0.429	1.656	68.	463.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN SOUTH CAROLINA

NAME - LAKE ROBINSON (MESO-EUTROPHIC)
COUNTY - CHESTERFIELD, DARLINGTON
STORET NO. - 4508 WORKING PAPER NO. 437. NTIS ACCESSION NO. PB-259 164/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	448.10	8.68	4.3	6.533	66.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
10.	50.	1.0	0.014	0.005	0.260	0.810

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(3/22/73) P	(7/ 6/73) P	(9/21/73) N
8.6	**********			

SUMMARY OF PHYTOPLANKTON DATA

3/22/73 GENERA	COUNT	7/ 6/73 GENERA	COUNT	9/21/73 GENERA	COUNT
COSMARIUM	5116	ASTERIONELLA	5572	COSMARIUM	9951
GYMNODINIUM	82	STAURASTRUM	182	SPHAEROZOSMA	5850
CRYPTOMONAS	58	SYNEDRA	136	STAURASTRUM	2988
ANKISTRODESMUS	47	MALLOMONAS	68	CLOSTERIUM	2671
TABELLARIA	12	FLAGELLATES	68	DESMID	477
OTHER	24	OTHER	293	OTHER	95
TOTAL	5339	TOTAL	6319	TOTAL	22032

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	925.	**********	25.	2355.	3305.
NITROGEN	3490.	**********	855.	104755.	109100.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	3295.	0.	0.38
NITROGEN	93330.	14.	12.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
BLACK CREEK	4.800	279.7	0.015	0.469	5.	241.
UNNAMED CREEK (B1)	0.090	8.6	0.015	0.461	5.	152.
LOWER ALLIGATOR CREEK	0.180	17.5	0.007	0.537	3.	174.
LITTLE BEAVERDAM CREEK	0.230	21.8	0.014	0.481	5.	160.
UNNAMED CREEK (E1)	0.030	3.2	0.019	0.410	6.	133.
BIG BEAVERDAM CREEK	0.260	25.7	0.018	0.688	6.	219.
POND HOLLOW BRANCH	0.140	13.6	0.023	0.541	7.	176.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN SOUTH CAROLINA

NAME - SALUDA LAKE (MESO-EUTROPHIC)
COUNTY - GREENVILLE, PICKENS
STORET NO. - 4515 WORKING PAPER NO. 438. NTIS ACCESSION NO. PB-261 843/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	753.70	2.25	4.0	17.680	6.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
14.	28.	0.6	0.046	0.006	0.230	0.390

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
1.5	0.2	(6/23/73) P	(9/18/73) P	(11/14/73) P

SUMMARY OF PHYTOPLANKTON DATA

6/23/73 GENERA	COUNT	9/18/73 GENERA	COUNT	11/14/73 GENERA	COUNT
FLAGELLATES	265	FLAGELLATES	62	MELOSIRA	29
PENNATE DIATOMS	35	ASTERIONELLA	49	NITZSCHIA	24
NAVICULA	35	ATTHEYA	37	FLAGELLATES	24
ACHNANTHES	18	CYCLOTELLA	12	ANABAENA	16
OSCILLATORIA	18	MERISMOPEDIA	12	SYNEDRA	12
OTHER	52	OTHER	11	OTHER	64
TOTAL	423	TOTAL	183	TOTAL	169

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	**********	**********	34275.	34275.
NITROGEN	**********	**********	**********	433920.	433920.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	20440.	40.	15.23
NITROGEN	243020.	44.	192.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SALUDA RIVER	17.560	738.1	0.063	0.784	46.	581.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN SOUTH CAROLINA

NAME - LAKE SECESSION (EUTROPHIC)
COUNTY - ABBEVILLE, ANDERSON
STORET NO. - 4514 WORKING PAPER NO. 439, NTIS ACCESSION NO. PB-259 162/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	499.90	3.56	******	6.240	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
16.	48.	0.9	0.057	0.006	0.355	0.865

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
10.7	0.2	(6/26/73) P	(9/18/73) P	(11/14/73) P

SUMMARY OF PHYTOPLANKTON DATA

6/26/73 GENERA	COUNT	9/18/73 GENERA	COUNT	11/14/73 GENERA	COUNT
MELOSIRA	621	ANABAENA	147	ANKISTRODESMUS	1145
CRYPTOMONAS	375	SYNEDRA	48	FLAGELLATES	1009
SYNEDRA	273	ANABAENOPSIS	48	SCENEDESMUS	627
FLAGELLATES	228	CYCLOTELLA	25	NEPHROCYTIUM	300
ANACYSTIS(MICROCYSTIS)	205	RAPHIDIOPSIS	25	SYNEDRA	300
OTHER	683	OTHER	74	OTHER	1854
TOTAL	2385	TOTAL	367	TOTAL	5235

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	19050.	**********	25.	6420.	25495.
NITROGEN	44450.	**********	855.	178970.	224275.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	11995.	53.	7.16
NITROGEN	188600.	16.	63.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
ROCKY RIVER	4.190	328.9	0.168	1.211	9.	345.
HENCOOP CREEK	0.940	72.8	0.084	0.893	34.	360.
BEAR CREEK	0.290	22.9	0.031	0.673	12.	266.
FIRST CREEK	0.140	11.0	0.025	1.096	10.	431.
GOVERNORS CREEK	0.130	10.5	0.023	1.104	9.	432.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN SOUTH CAROLINA

NAME - WATEREE LAKE (EUTROPHIC)
COUNTY - FAIRFIELD, KERSHAW, LANCASTER
STORET NO. - 4510 WORKING PAPER NO. 440. NTIS ACCESSION NO. PB-260 510/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	12302.50	55.48	6.9	161.500	27.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
18.	100.	0.6	0.094	0.034	0.450	0.790

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
8.4	**********	(3/30/73) P	(7/ 6/73) P	(9/21/73) N

SUMMARY OF PHYTOPLANKTON DATA

3/30/73 GENERA	COUNT	7/ 6/73 GENERA	COUNT	9/21/73 GENERA	COUNT
MELOSIRA	627	MELOSIRA	1163	DACTYLOCOCCOPSIS	1493
CRYPTOMONAS	341	MERISMOPEDIA	658	ANABAENA	717
FLAGELLATES	286	NITZSCHIA	607	RAPHIDIOPSIS	418
DACTYLOCOCCOPSIS	231	OSCILLATORIA	607	CYCLOTELLA	388
CYCLOTELLA	176	FLAGELLATES	455	FLAGELLATES	358
OTHER	903	OTHER	3696	OTHER	1523
TOTAL	2564	TOTAL	7186	TOTAL	4897

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	503960.	**********	**********	113560.	617520.
NITROGEN	1646555.	**********	**********	2463405.	4109960.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	462785.	25.	11.13
NITROGEN	4512345.	LOSS	74.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
WHITE OAK CREEK	0.380	33.7	0.026	0.392	9.	142.
BEAVER CREEK	1.160	101.8	0.026	0.463	10.	169.
CEDAR CREEK	1.000	83.1	0.074	0.616	27.	224.
CATAWBA RIVER	150.200	11292.4	0.128	0.825	9.	198.
BIG WATEREE CREEK	1.680	146.9	0.084	0.429	31.	157.
LITTLE WATEREE CREEK	2.020	176.6	0.036	0.607	4.	210.
DUTCHMANS CREEK	0.810	70.7	0.029	0.431	9.	152.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN SOUTH CAROLINA

NAME - LAKE WYLIE (EUTROPHIC)
COUNTY - YORK, SC: GASTON, MECKLENBURG, NC
STORET NO. - 4511 WORKING PAPER NO. 441, NTIS ACCESSION NO. PB-259 161/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	7821.80	53.10	7.0	110.190	39.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
16.	72.	1.0	0.045	0.013	0.380	0.640

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(3/28/73) P	(7/12/73) P	(9/20/73) P
5.4	**********			

SUMMARY OF PHYTOPLANKTON DATA

3/28/73		7/12/73		9/20/73	
GENERA	COUNT	GENERA	COUNT	GENERA	COUNT
FLAGELLATES	1332	MELOSIRA	1254	ANABAENA	132
MELOSIRA	679	CYCLOTELLA	874	CENTRIC DIATOM	119
SYNEDRA	366	CRYPTOMONAS	608	CRYPTOMONAS	105
CYCLOTELLA	314	FLAGELLATES	608	SCENEDESMUS	92
DACTYLOCOCCOPSIS	131	DINOFLAGELLATES	266	CHLORELLA	79
OTHER	339	OTHER	1027	OTHER	474
TOTAL	3161	TOTAL	4637	TOTAL	1001

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	175855.	**********	30.	269070.	444955.
NITROGEN	280360.	**********	1130.	3378850.	3660340.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	176385.	60.	8.38
NITROGEN	2753045.	25.	68.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
PAW CREEK	0.470	35.2	0.696	1.335	301.	575.
CATAWBA RIVER	76.470	5309.5	0.029	0.967	12.	431.
S. FORK CATAWBA RIVER	22.600	1639.5	0.240	1.147	106.	444.
CATAWBA CREEK	1.000	69.9	2.677	9.900	142.	446.
CROWDERS CREEK	3.840	282.3	0.198	1.415	5.	474.
BEAVERDAM CREEK	0.670	49.2	0.093	0.916	19.	337.
ALLISON CREEK	1.540	113.7	0.092	0.853	14.	307.
LITTLE ALLISON CREEK	0.370	27.2	0.040	0.568	17.	247.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN TENNESSEE

NAME - BARKLEY LAKE (EUTROPHIC)
COUNTY - STEWART, MONTGOMERY, TN; TRIGG, LYON, KY
STORET NO. - 4701 WORKING PAPER NO. 442, NTIS ACCESSION NO. PB-262 870/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	45578.80	234.40	4.6	984.950	16.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
73.	192.	0.6	0.128	0.047	0.480	0.840

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
12.7	3.3 - 8.7 (3)	(5/16/73) N	(8/14/73) N	(10/20/73) N

SUMMARY OF PHYTOPLANKTON DATA

5/16/73 GENERA	COUNT	8/14/73 GENERA	COUNT	10/20/73 GENERA	COUNT
MELOSIRA	12364	MELOSIRA	3700	MELOSIRA	1713
FLAGELLATES	1273	OSCILLATORIA	727	FLAGELLATES	1022
CYCLOTELLA	864	CYCLOTELLA	341	STEPHANODISCUS	299
STEPHANODISCUS	182	RAPHIDIOPSIS	318	CRYPTOMONAS	126
DINOFLAGELLATES	136	CRYPTOMONAS	227	OSCILLATORIA	94
OTHER	378	OTHER	1044	OTHER	487
TOTAL	15197	TOTAL	6357	TOTAL	3741

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	151515.	**********	85.	3876940.	4028540.
NITROGEN	437895.	**********	3195.	29510835.	29951925.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	4209050.	LOSS	17.19
NITROGEN	32674930.	LOSS	127.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CUMBERLAND RIVER	620.040	37389.2	0.149	1.047	80.	450.
UNNAMED STREAM	0.110	8.4	10.573	9.972	5424.	7979.
EDDY CREEK	2.650	193.0	0.385	2.432	119.	990.
MUDDY FORK LITTLE RIVER	4.930	339.3	0.066	2.115	30.	978.
LITTLE RIVER	16.020	1098.2	0.229	2.877	81.	1264.
DONALDSON CREEK	0.660	45.3	0.017	0.782	8.	362.
SALINE CREEK	1.640	112.4	0.064	1.084	30.	502.
DYERS CREEK	0.680	46.9	0.012	0.953	6.	351.
FERRY CROSS CREEK	0.710	50.5	0.016	0.837	7.	373.
BLOOMING GROVE CREEK	1.110	79.0	0.071	0.812	26.	348.
RED RIVER	48.020	3768.4	0.159	2.293	43.	871.
BUDDS CREEK	0.840	59.8	0.032	0.650	14.	290.
YELLOW CREEK	6.070	432.5	0.059	0.725	26.	324.

WELLS CREEK	2.020	144.3	0.057	0.636	15.	255.
SOUTH CROSS CREEK	0.490	34.7	0.023	0.610	10.	272.
LONG CREEK	0.680	48.2	0.024	0.598	11.	266.
LICK CREEK	0.500	35.7	0.021	0.426	9.	190.
BEAR CREEK	0.600	42.7	0.010	1.225	4.	546.
CANAL	164.770	**********	0.110	1.000	**********	**********

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN TENNESSEE

NAME - BOONE RESERVOIR (EUTROPHIC)
COUNTY - WASHINGTON, SULLIVAN, CARTER
STORET NO. - 4704 WORKING PAPER NO. 443. NTIS ACCESSION NO. PB-261 772/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	4765.60	17.80	13.3	66.500	42.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
80.	185.	1.5	0.052	0.029	0.995	1.205

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
11.4	8.1	(4/ 3/73) P (7/12/73) P AND N (10/27/73) P AND N

SUMMARY OF PHYTOPLANKTON DATA

4/ 3/73 GENERA	COUNT	10/27/73 GENERA	COUNT
FLAGELLATES	4268	DACTYLOCOCCOPSIS	11379
STEPHANODISCUS	2044	FLAGELLATES	6197
MELOSIRA	661	SCENEDESMUS	3048
DACTYLOCOCCOPSIS	451	TETRAEDRON	2083
SCENEDESMUS	60	CRYPTOMONAS	1423
OTHER	60	OTHER	2795
TOTAL	7544	TOTAL	26925

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	95130.	**********	120.	95710.	190960.
NITROGEN	299085.	**********	4595.	3830640.	4134320.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	99020.	48.	10.73
NITROGEN	2999590.	27.	232.3

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SOUTH FORK HOLSTON RIVER	27.860	1981.3	0.010	1.283	5.	635.
BOONES CREEK	0.400	35.5	0.039	1.802	14.	698.
CARROLL CREEK	0.080	7.6	0.040	2.274	14.	761.
WATAUGA RIVER	32.500	2250.0	0.084	2.274	24.	985.
BEAVER CREEK	3.120	282.3	0.667	3.181	102.	690.
MUDDY CREEK	0.450	40.4	0.063	1.822	23.	646.
WAGNER CREEK	0.130	11.9	0.097	2.315	36.	817.
GAMMON CREEK	0.030	2.6	0.019	2.378	6.	754.
INDIAN CREEK	0.750	47.7	0.029	1.486	14.	744.
DRY CREEK	0.320	20.4	0.024	0.494	13.	248.
POSSUM CREEK	0.340	21.7	0.027	1.037	13.	385.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN TENNESSEE

NAME - SOUTH HOLSTON RESERVOIR (MESO-EUTROPHIC)
COUNTY - SULLIVAN, TN; WASHINGTON, VA
STORET NO. - 4725 WORKING PAPER NO. 443. NTIS ACCESSION NO. PB-261 772/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	1820.80	30.68	26.4	25.320	370.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
80.	166.	2.4	0.014	0.008	0.570	0.855

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
7.7	0.1	(5/23/73) P	(8/20/73) P	(10/27/73) P

SUMMARY OF PHYTOPLANKTON DATA

5/23/73 GENERA	COUNT	8/20/73 GENERA	COUNT	10/27/73 GENERA	COUNT
FLAGELLATES	6167	RAPHIDIOPSIS	8474	FLAGELLATES	772
STEPHANODISCUS	2011	SYNEDRA	1362	MELOSIRA	386
FRAGILARIA	1479	FLAGELLATES	794	RAPHIDIOPSIS	318
MELOSIRA	410	TETRAEDRON	303	TETRAEDRON	318
DACTYLOCOCCOPSIS	36	ACHNANTHES	303	CRYPTOMONAS	295
OTHER	72	OTHER	795	OTHER	522
TOTAL	10175	TOTAL	12031	TOTAL	2611

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	22030.	**********	10.	31950.	53990.
NITROGEN	61465.	**********	335.	1330460.	1392260.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	8300.	85.	1.76
NITROGEN	894550.	36.	45.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
SOUTH FORK HOLSTON RIVER	13.800	826.2	0.025	1.187	10.	621.
SPRING CREEK	0.570	44.5	0.035	1.961	15.	800.
WOLF CREEK	1.040	69.2	0.252	2.449	41.	920.
FIFTEENMILE CREEK	0.630	42.2	0.077	2.292	38.	1090.
MID. FORK HOLSTON RIVER	10.550	632.0	0.088	1.742	25.	865.
BAUMGARTNER BRANCH	0.100	8.1	0.021	1.296	9.	528.
GRABLE BRANCH	0.040	3.2	0.029	1.258	12.	511.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN TENNESSEE

NAME - CHEATHAM RESERVOIR (EUTROPHIC)
COUNTY - CHEATHAM, DAVIDSON
STORET NO. - 4706 WORKING PAPER NO. 444, NTIS ACCESSION NO. PB-265 587/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	35682.20	30.15	4.3	625.100	2.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
59.	171.	0.7	0.142	0.084	0.460	0.720

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
8.2	8.8	(5/21/73) P	(8/16/73) N	(10/23/73) N

SUMMARY OF PHYTOPLANKTON DATA

5/21/73 GENERA	COUNT	8/16/73 GENERA	COUNT	10/23/73 GENERA	COUNT
MELOSIRA	1808	MELOSIRA	2479	MELOSIRA	4268
STEPHANODISCUS	1173	FLAGELLATES	436	FLAGELLATES	1498
FLAGELLATES	869	STEPHANODISCUS	367	CYCLOTELLA	174
NITZSCHIA	69	BLUE-GREEN FILAMENT	279	DACTYLOCOCCOPSIS	174
DACTYLOCOCCOPSIS	28	NITZSCHIA	140	SCENEDESMUS	155
OTHER	98	OTHER	1062	OTHER	397
TOTAL	4045	TOTAL	4763	TOTAL	6666

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	286690.	**********	60.	2892575.	3179325.
NITROGEN	832305.	**********	2280.	20950475.	21785060.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	4466890.	LOSS	105.45
NITROGEN	17655215.	19.	722.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CUMBERLAND RIVER	518.950	30233.1	0.103	1.020	58.	555.
JOHNSON CREEK	0.730	57.8	0.020	0.799	8.	322.
HARPETH RIVER	33.850	1882.9	0.480	1.187	267.	678.
OVERALL CREEK	0.250	20.9	0.388	1.225	141.	387.
RICHLAND CREEK	0.920	73.0	0.383	1.248	152.	498.
BROWNS CREEK	0.430	40.7	0.633	2.961	218.	1004.
MILL CREEK	3.900	277.1	0.712	1.756	307.	786.
STONES RIVER	42.100	2419.1	0.354	1.451	184.	791.
MANSKER CREEK	1.680	119.1	0.210	1.084	93.	489.
WHITES CREEK	1.930	163.9	0.702	1.349	217.	459.
BIG MARROWBONE CREEK	1.110	91.4	0.021	0.660	8.	255.
SYCAMORE CREEK	3.260	269.4	0.023	0.886	7.	337.
SPRING CREEK	0.580	47.7	0.085	2.865	8.	522.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN TENNESSEE

NAME - OLD HICKORY RESERVOIR (EUTROPHIC)
COUNTY - DAVIDSON, RUTHERFORD, SMITH, SUMNER, TROUSDALE, WILSON
STORET NO. - 4720 WORKING PAPER NO. 444, NTIS ACCESSION NO. PB-265 587/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	30233.10	91.06	5.6	519.000	11.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
52.	148.	0.8	0.058	0.019	0.330	0.550

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
8.9	3.8	(5/22/73) P	(8/16/73) P	(10/22/73) N

SUMMARY OF PHYTOPLANKTON DATA

5/22/73 GENERA	COUNT	8/16/73 GENERA	COUNT	10/22/73 GENERA	COUNT
MELOSIRA	733	MELOSIRA	5466	MELOSIRA	4523
FLAGELLATES	391	FLAGELLATES	1520	FLAGELLATES	1455
CYCLOTELLA	134	STEPHANODISCUS	1261	CRYPTOMONAS	364
STEPHANODISCUS	110	RAPHIDIOPSIS	582	DACTYLOCOCCOPSIS	318
DINOFLAGELLATES	37	CYCLOTELLA	420	CYCLOTELLA	250
OTHER	132	OTHER	1584	OTHER	1004
TOTAL	1537	TOTAL	10833	TOTAL	7914

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	34500.	**********	80.	1324525.	1359105.
NITROGEN	86820.	**********	2925.	16887315.	16977060.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1497710.	LOSS	14.93
NITROGEN	18096625.	LOSS	186.4

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CUMBERLAND RIVER	473.150	27687.1	0.068	1.010	38.	547.
CEDAR CREEK (WESTERN)	1.710	92.5	0.147	0.855	77.	481.
SPENCER CREEK	0.700	38.1	0.149	0.975	84.	576.
BARTONS CREEK	2.490	135.2	1.668	2.843	105.*	639.*
SPRING CREEK	2.740	148.7	0.259	1.031	149.	609.
CEDAR CREEK (EASTERN)	1.590	86.2	0.166	1.260	96.	745.
ROUND LICK CREEK	3.780	204.9	0.180	1.556	95.	897.
PEYTON CREEK	2.120	129.8	0.339	1.544	175.	807.
GOOSE CREEK	3.210	196.1	0.254	1.370	108.	717.
LITTLE GOOSE CREEK	1.240	75.9	0.294	1.340	122.	655.
HLEDSOE CREEK	3.390	239.6	0.230	1.272	103.	575.
TOWN CREEK	0.330	23.7	0.346	1.980	105.*	639.*
EAST CAMP CREEK	0.750	53.4	0.314	2.062	141.	931.

STATION CAMP CREEK	1.470	104.4	0.199	1.217	90.	550.
DRAKES CREEK	1.260	89.1	0.251	1.521	112.	687.

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN TENNESSEE

NAME - J. PERCY PRIEST RES. (EUTROPHIC)
COUNTY - DAVIDSON, RUTHERFORD
STORET NO. - 4723 WORKING PAPER NO. 444. NTIS ACCESSION NO. PB-265 587/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	2310.30	57.47	8.5	40.580	139.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
128.	255.	1.8	0.056	0.021	0.155	0.565

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/21/73) N	(8/16/73) P	(10/24/73) N
10.0	**********			

SUMMARY OF PHYTOPLANKTON DATA

5/21/73 GENERA	COUNT	8/16/73 GENERA	COUNT	10/24/73 GENERA	COUNT
MELOSIRA	2653	FLAGELLATES	771	DACTYLOCOCCOPSIS	2708
FLAGELLATES	1992	ACHNANTHES	363	FLAGELLATES	2106
STEPHANODISCUS	1311	LYNGBYA	249	MELOSIRA	1228
ASTERIONELLA	200	STEPHANODISCUS	227	STEPHANODISCUS	802
OSCILLATORIA	120	RAPHIDIOPSIS	204	SYNEDRA	551
OTHER	390	OTHER	615	OTHER	1602
TOTAL	6666	TOTAL	2429	TOTAL	8997

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	72720.	825.	30.	199240.	272815.
NITROGEN	121335.	1920.	1170.	1443160.	1567585.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	244995.	10.	4.75
NITROGEN	1485790.	5.	27.3

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
EAST FORK STONES RIVER	13.310	771.8	0.153	1.291	84.	708.
WEST FORK STONES RIVER	10.540	650.1	0.466	10.300	158.	796.
FALL CREEK	3.060	165.8	0.044	0.653	27.	385.
SUGGS CREEK	1.430	98.9	0.031	0.543	19.	320.
HURRICANE CREEK	0.840	59.8	0.132	0.753	56.	333.
STEWART CREEK	2.440	147.4	0.144	0.914	74.	485.
HARTS BRANCH	0.470	28.5	0.166	0.743	90.	394.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN TENNESSEE

NAME - CHEROKEE LAKE (EUTROPHIC)
COUNTY - JEFFERSON, HAMBLEN, GRAINGER, HAWKINS
STORET NO. - 4707 WORKING PAPER NO. 445, NTIS ACCESSION NO. PB-261 776/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	8878.50	122.62	14.9	120.600	190.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
90.	265.	1.3	0.051	0.022	0.780	1.270

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
12.2	0.1 - 4.3 (2)	(5/24/73) P (8/23/73) P AND N (10/27/73) P

SUMMARY OF PHYTOPLANKTON DATA

5/24/73 GENERA	COUNT	8/23/73 GENERA	COUNT	10/27/73 GENERA	COUNT
FLAGELLATES	1486	RAPHIDIOPSIS	28561	FLAGELLATES	2162
MELOSIRA	1340	CYCLOTELLA	1219	MELOSIRA	713
CYCLOTELLA	801	FLAGELLATES	1045	STEPHANODISCUS	356
SCENEDESMUS	671	TETRAEDRON	435	MESOSTIGMA	143
NITZSCHIA	248	SYNEDRA	305	DACTYLOCOCCOPSIS	95
OTHER	469	OTHER	1045	OTHER	408
TOTAL	5015	TOTAL	32610	TOTAL	3877

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	34705.	**********	30.	435065.	469800.
NITROGEN	87185.	**********	1205.	6738050.	6826440.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	174735.	63.	3.83
NITROGEN	6402360.	6.	55.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
HOLSTON RIVER	107.760	7795.9	0.116	1.760	53.	779.
CANEY CREEK	0.800	59.6	0.041	1.115	17.	477.
CLOUD'S CREEK	0.590	45.1	0.057	1.363	23.	564.
POOR VALLEY CREEK	1.820	139.6	0.020	1.030	8.	427.
TURKEY CREEK	0.700	49.5	0.226	2.491	98.	1129.
SPRING CREEK	0.450	19.8	0.085	2.805	61.	1756.
ROBERTSON CREEK	0.570	47.9	0.031	1.587	12.	592.
LOUDERBACK CREEK	0.630	56.2	0.069	1.203	24.	452.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN TENNESSEE

NAME - CHICKAMAUGA RESERVOIR (EUTROPHIC)
COUNTY - HAMILTON, RHEA, MEIGS, MCMINN
STORET NO. - 4708 WORKING PAPER NO. 446, NTIS ACCESSION NO. PB-268 339/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	53846.10	143.25	5.4	924.800	11.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY (MG/L)	MEDIAN CONDUCTIVITY (UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P (MG/L)	MEDIAN ORTHO P (MG/L)	MEDIAN INORG N (MG/L)	MEDIAN TOTAL N (MG/L)
59.	160.	0.9	0.031	0.012	0.440	0.600

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
3.1	0.3 - 0.6 (2)	(5/23/73) P	(8/23/73) P	(10/29/73) P

SUMMARY OF PHYTOPLANKTON DATA

5/23/73 GENERA	COUNT	8/23/73 GENERA	COUNT	10/29/73 GENERA	COUNT
FLAGELLATES	438	FLAGELLATES	241	FLAGELLATES	974
MELOSIRA	305	RAPHIDIOPSIS	201	MELOSIRA	220
DINOBRYON	204	SYNEDRA	121	SYNEDRA	79
CYCLOTELLA	112	MELOSIRA	107	SCENEDESMUS	47
DACTYLOCOCCOPSIS	71	NITZSCHIA	94	NAVICULA	32
OTHER	215	OTHER	309	OTHER	46
TOTAL	1345	TOTAL	1073	TOTAL	1398

IV. NUTRIENT LOADING CHARACTERISTICS (LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	60155.	**********	45.	1246155.	1306355.
NITROGEN	176255.	**********	1790.	46174325.	46352370.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1101375.	16.	9.12
NITROGEN	26652990.	42.	323.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
UNNAMED CREEK (H1)	0.080	3.2	0.380	21.795	67.	16566.
WOLFTEVER CREEK	4.340	261.6	0.111	1.036	46.	508.
LONG SAVANNAH CREEK	1.730	104.1	0.031	1.152	16.	498.
GUNSTOCKER CREEK	0.760	44.5	0.037	0.896	20.	387.
CANDIES CREEK	4.950	290.1	0.072	0.872	39.	473.
SOUTH MOUSE CREEK	1.760	103.3	0.487	3.042	20.*	398.*
HIAWASSEE RIVER	125.370	5951.8	0.036	0.740	22.	484.
NORTH MOUSE CREEK	4.280	242.7	0.050	1.231	28.	691.
SPRING CREEK	0.790	44.8	0.041	0.971	23.	409.
ROGERS CREEK	2.560	144.5	0.031	0.652	17.	367.
GOODFIELD CREEK	1.140	64.5	0.033	0.771	18.	436.
SEWEE CREEK	5.650	318.6	0.038	0.667	22.	377.
TENNESSEE RIVER	741.050	44832.9	0.043	1.781	23.	931.

LITTLE RICHLAND CREEK	1.110	47.7	0.030	1.050	22.	779.
RICHLAND CREEK	4.910	210.3	0.018	0.627	20.*	398.*
SALE CREEK	7.020	300.4	0.014	0.851	11.	633.
SODDY CREEK	3.970	170.2	0.010	0.388	5.	288.

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN TENNESSEE

NAME - FT. LOUDON RESERVOIR (EUTROPHIC)
COUNTY - LOUDON, KNOX, BLOUNT
STORET NO. - 4712 WORKING PAPER NO. 446. NTIS ACCESSION NO. PB-268 339/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	24734.50	59.09	7.6	362.300	15.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
68.	210.	0.9	0.054	0.025	0.550	0.960

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
4.8	2.5 - 5.0 (3)	(5/24/73) P	(8/24/73) P	(10/27/73) N

SUMMARY OF PHYTOPLANKTON DATA

5/24/73 GENERA	COUNT	8/24/73 GENERA	COUNT	10/27/73 GENERA	COUNT
MELOSIRA	2746	RAPHIDIOPSIS	1356	FLAGELLATES	1755
CENTRIC DIATOM	1223	SYNEDRA	1069	MELOSIRA	428
FLAGELLATES	1010	FLAGELLATES	443	TRACHELOMONAS	214
PENNATE DIATOMS	301	MELOSIRA	234	DACTYLOCOCCOPSIS	117
DACTYLOCOCCOPSIS	89	CYCLOTELLA	130	CYCLOTELLA	97
OTHER	248	OTHER	416	OTHER	327
TOTAL	5617	TOTAL	3648	TOTAL	2938

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	402170.	**********	170.	599285.	1001625.
NITROGEN	1027700.	**********	6335.	12924345.	13958380.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	748450.	25.	16.95
NITROGEN	17124690.	LOSS	236.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
FRENCH BROAD RIVER	213.250	13271.2	0.050	1.050	26.	534.
HOLSTON RIVER	114.140	9779.8	0.047	1.399	16.	440.
FIRST CREEK	0.720	57.2	0.113	1.797	46.	601.
SECOND CREEK	0.310	18.4	0.424	2.418	227.	1278.
THIRD CREEK	0.730	44.0	0.107	2.508	58.	1325.
FOURTH CREEK	0.470	28.2	0.092	1.930	50.	1021.
GALLAGHER CREEK	1.260	59.6	0.039	1.350	27.	906.
LACKEY CREEK	0.190	12.1	0.022	1.420	12.	710.
LITTLE RIVER	18.960	885.8	0.127	1.588	63.	1031.
STOCK CREEK	1.050	49.0	0.049	0.851	34.	579.
TURKEY CREEK	1.200	64.2	0.236	1.882	146.	1115.
KNOB CREEK	0.350	16.5	0.050	1.201	34.	511.
GOOSE CREEK	0.160	9.4	0.083	1.668	45.	831.

BAKER CREEK	0.130	8.1	0.048	1.842	27.	477.
BURNETT CREEK	0.200	9.3	0.043	0.926	23.	470.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN TENNESSEE

NAME - NICKAJACK RESERVOIR (EUTROPHIC)
COUNTY - MARION, HAMILTON
STORET NO. - 4717 WORKING PAPER NO. 446. NTIS ACCESSION NO. PB-268 339/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	56643.30	41.97	7.1	957.050	4.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
57.	162.	1.0	0.051	0.025	0.495	0.725

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
2.7	5.1	(5/23/73) P (8/18/73) P AND N (10/30/73) P

SUMMARY OF PHYTOPLANKTON DATA

5/23/73 GENERA	COUNT	8/18/73 GENERA	COUNT	10/30/73 GENERA	COUNT
MELOSIRA	867	FLAGELLATES	1303	FLAGELLATES	409
FLAGELLATES	606	MELOSIRA	318	PENNATE DIATOMS	85
CYCLOTELLA	119	CYCLOTELLA	143	OSCILLATORIA	28
DACTYLOCOCCOPSIS	87	FRAGILARIA	143	CENTRIC DIATOM	28
COSCINODISCUS	43	CRYPTOMONAS	95	NAVICULA	14
OTHER	151	OTHER	319	OTHER	0
TOTAL	1873	TOTAL	2321	TOTAL	564

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	378470.	**********	60.	1357255.	1735785.
NITROGEN	1078890.	**********	2335.	22496415.	23577640.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1554460.	10.	41.36
NITROGEN	23668705.	LOSS	561.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
TENNESSEE RIVER	927.750	53846.1	0.038	0.775	22.	376.
NORTH CHICKAMAUGA CREEK	7.900	313.4	0.022	0.788	17.	632.
STRINGERS CREEK	0.380	16.1	0.120	1.612	86.	1226.
MOUNTAIN CREEK	0.870	34.4	0.032	0.801	24.	644.
SUCK CREEK	1.500	59.6	0.009	0.461	7.	369.
COLE CITY CREEK	1.360	75.1	0.032	0.752	18.	435.
RUNNING WATER CREEK	1.370	54.6	0.026	0.509	20.	408.
LOOKOUT CREEK	8.770	484.3	0.068	1.077	39.	622.
CHATTANOOGA CREEK	3.500	193.5	0.313	2.754	178.	1593.
CITICO CREEK	0.140	7.8	0.503	3.020	284.	1738.
SOUTH CHICKAMAUGA CREEK	21.220	1201.8	0.289	1.881	106.	932.
DRY CREEK	0.410	16.0	0.007	1.107	6.	907.
BUTCHER CREEK	0.130	5.0	0.006	0.407	5.	327.

ELLIS GAP BRANCH	0.040	3.7	0.006	0.495	4.	393.
BILL MCNABB GULF	0.100	4.0	0.006	0.415	5.	334.
UNNAMED CREEK (#1)	0.060	2.3	0.005	0.374	4.	326.
MULLENS CREEK	1.350	43.0	0.006	0.546	5.	546.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN TENNESSEE

NAME - WATTS BAR RESERVOIR (EUTROPHIC)
COUNTY - CUMBERLAND, LOUDON, MEIGS, RHEA, ROANE
STORET NO. - 4722 WORKING PAPER NO. 446, NTIS ACCESSION NO. PB-268 339/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	44832.90	157.82	7.9	741.050	23.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
66.	169.	1.0	0.032	0.012	0.510	0.740

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/25/73) P	(8/24/73) P	(10/24/73) P
5.6	0.2			

SUMMARY OF PHYTOPLANKTON DATA

5/25/73 GENERA	COUNT	8/24/73 GENERA	COUNT	10/24/73 GENERA	COUNT
MELOSIRA	3315	FLAGELLATES	2107	FLAGELLATES	919
FLAGELLATES	1138	RAPHIDIOPSIS	987	MELOSIRA	427
STEPHANODISCUS	201	MELOSIRA	702	SCENEDESMUS	130
SYNEDRA	100	SYNEDRA	241	STEPHANODISCUS	98
ASTERIONELLA	67	CYCLOTELLA	176	CENTRIC DIATOM	66
OTHER	277	OTHER	484	OTHER	260
TOTAL	5098	TOTAL	4697	TOTAL	1900

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	74930.	**********	75.	1235225.	1310230.
NITROGEN	255640.	**********	3370.	21184645.	21443655.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	1018950.	22.	8.30
NITROGEN	20612910.	4.	135.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
TENNESSEE RIVER	371.590	24734.5	0.063	76.698	31.	510.
MUDDY CREEK	0.530	28.5	0.028	1.066	17.	634.
TOWN CREEK	0.480	25.5	0.036	0.829	23.	476.
LITTLE TENNESSEE RIVER	166.900	6803.9	0.026	0.647	21.	502.
STEEKEE CREEK	0.360	18.6	0.043	0.782	27.	477.
SWEETWATER CREEK	3.150	164.2	0.149	1.511	74.	870.
POND CREEK	1.860	96.6	0.066	1.057	41.	645.
PAINT ROCK CREEK	1.550	81.1	0.028	0.432	17.	564.
PINEY RIVER	7.690	354.8	0.012	0.315	8.	218.
WHITES CREEK	7.740	357.4	0.350	1.205	221.	786.
CANEY CREEK	1.470	70.4	0.041	0.880	27.	582.
EMORY RIVER	45.020	2240.3	0.033	0.526	21.	337.
LITTLE EMORY RIVER	2.230	108.0	0.024	0.436	16.	285.

POPLAR CREEK	7.770	352.2	0.205	1.434	50.	713.
CLINCH RIVER	127.770	8767.1	0.033	0.809	16.	338.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN TENNESSEE

NAME - DOUGLAS LAKE (EUTROPHIC)
COUNTY - SEVIER, JEFFERSON, COCKE
STORET NO. - 4711 WORKING PAPER NO. 447, NTIS ACCESSION NO. PB-261 964/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	11766.40	123.03	14.1	191.700	116.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
46.	168.	1.5	0.026	0.014	0.440	0.700

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(5/25/73) P	(8/23/73) P	(10/27/73) P
4.6	0.2 - 4.2 (2)			

SUMMARY OF PHYTOPLANKTON DATA

5/25/73 GENERA	COUNT	8/23/73 GENERA	COUNT	10/27/73 GENERA	COUNT
FLAGELLATES	708	NITZSCHIA	4913	FLAGELLATES	724
MELOSIRA	94	FLAGELLATES	648	MELOSIRA	559
STEPHANODISCUS	94	OSCILLATORIA	342	NITZSCHIA	428
ASTERIONELLA	73	SYNEDRA	342	STEPHANODISCUS	164
NITZSCHIA	62	SCENEDESMUS	180	TRACHELOMONAS	132
OTHER	217	OTHER	306	OTHER	396
TOTAL	1248	TOTAL	6731	TOTAL	2403

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	12870.	**********	75.	669425.	682370.
NITROGEN	33890.	**********	2825.	9089940.	9126655.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	286690.	58.	5.55
NITROGEN	7702060.	16.	74.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
FRENCH BROAD RIVER	81.430	4812.2	0.111	1.641	61.	879.
LONG CREEK	0.890	92.2	0.026	1.482	8.	456.
NOLICHUCKY RIVER	64.610	4548.0	0.085	1.176	39.	530.
CLAY RIVER	0.850	46.4	0.032	0.978	19.	569.
PIGEON RIVER	36.720	1784.5	0.166	1.755	103.	1128.
CLEAR CREEK	0.500	26.9	0.178	1.933	105.	993.
FLAT CREEK	1.360	74.1	0.031	1.251	18.	728.
LEADVALE CREEK	0.070	6.7	0.057	1.410	15.*	584.*
UNNAMED CREEK (K1)	0.040	4.2	0.022	2.013	15.*	585.*

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN TENNESSEE

NAME - GREAT FALLS LAKE (MESOTROPHIC)
COUNTY - WHITE, VAN BUREN
STORET NO. - 4713 WORKING PAPER NO. 449. NTIS ACCESSION NO. PB-261 827/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	4346.00	12.38	5.0	84.450	9.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
73.	165.	1.4	0.020	0.007	0.405	0.720

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
4.0	0.1	(5/31/73) P	(8/17/73) P	(10/24/73) P

SUMMARY OF PHYTOPLANKTON DATA

5/31/73 GENERA	COUNT	8/17/73 GENERA	COUNT	10/24/73 GENERA	COUNT
FLAGELLATES	112	SYNEDRA	925	FLAGELLATES	1653
DINOFLAGELLATES	22	FLAGELLATES	661	TETRAEDRON	1290
STEPHANODISCUS	22	ACHNANTHES	375	DACTYLOCOCCOPSIS	444
		CYCLOTELLA	308	DINOBRYON	383
		STEPHANODISCUS	154	STEPHANODISCUS	222
OTHER	0	OTHER	618	OTHER	323
TOTAL	156	TOTAL	3041	TOTAL	4315

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	20310.	**********	20.	120255.	140585.
NITROGEN	60910.	**********	780.	2412680.	2474370.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	72460.	48.	11.36
NITROGEN	1862355.	25.	199.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
COLLINS RIVER	38.040	2046.1	0.085	1.154	43.	661.
ROCKY RIVER	6.690	305.6	0.016	0.820	11.	572.
CANE CREEK	7.600	424.8	0.014	0.515	8.	295.
CANEY FORK	17.370	852.1	0.012	0.475	8.	309.
HICKORY VALLEY BRANCH	0.690	31.6	0.025	0.911	18.	608.
CALFKILLER RIVER	12.060	523.2	0.060	1.123	33.	795.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN TENNESSEE

NAME - REELFOOT LAKE (HYPEREUTROPHIC)
COUNTY - OBION
STORET NO. - 4727 WORKING PAPER NO. 453. NTIS ACCESSION NO. PB-260 886/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
NATURAL	567.80	36.42	1.4	6.400	******

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
91.	200.	0.6	0.233	0.059	0.170	2.170

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
81.0	3.4 - 6.4 (2)	(5/15/73) N	(8/11/73) N	(10/19/73) N

SUMMARY OF PHYTOPLANKTON DATA

5/15/73 GENERA	COUNT	8/11/73 GENERA	COUNT	10/19/73 GENERA	COUNT
MELOSIRA	4354	MELOSIRA	24631	MELOSIRA	20683
FLAGELLATES	3886	MERISMOPEDIA	5437	MERISMOPEDIA	4573
NITZSCHIA	2387	NITZSCHIA	3107	STEPHANODISCUS	3949
STEPHANODISCUS	1966	RAPHIDIOPSIS	2774	ANACYSTIS(MICROCYSTIS)	3845
OSCILLATORIA	796	STEPHANODISCUS	2663	FLAGELLATES	2910
OTHER	2155	OTHER	15754	OTHER	22555
TOTAL	15544	TOTAL	54366	TOTAL	58515

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	**********	61600.	75.	55610.	117285.
NITROGEN	**********	201215.	2845.	272380.	476440.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	**********	*****	3.22
NITROGEN	**********	*****	13.1

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
RUNNING SLOUGH	0.870	77.2	0.224	1.257	80.	450.
REELFOOT CREEK	3.360	297.8	0.341	1.213	62.*	324.*
INDIAN CREEK	0.250	21.9	0.127	0.556	45.	198.

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN TENNESSEE

NAME - TIMS FORD RESERVOIR (EUTROPHIC)
COUNTY - FRANKLIN, MOORE
STORET NO. - 4724 WORKING PAPER NO. 455. NTIS ACCESSION NO. PB-262 869/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	1370.10	42.90	15.2	24.200	379.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
61.	135.	2.6	0.021	0.009	0.445	0.695

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
6.7	0.1 - 0.1 (2)	(5/21/73) P	(8/15/73) P	(10/23/73) P

SUMMARY OF PHYTOPLANKTON DATA

5/21/73 GENERA	COUNT	8/15/73 GENERA	COUNT	10/23/73 GENERA	COUNT
FLAGELLATES	1858	ACHNANTHES	489	FLAGELLATES	1343
MELOSIRA	1728	FLAGELLATES	415	NITZSCHIA	290
ASTERIONELLA	597	TETRAEDRON	228	MELOSIRA	221
FRAGILARIA	160	LYNGBYA	187	ACHNANTHES	124
SYNEDRA	150	ANABAENA	179	CYCLOTELLA	111
OTHER	214	OTHER	527	OTHER	388
TOTAL	4707	TOTAL	2025	TOTAL	2477

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	29730.	**********	20.	24900.	54650.
NITROGEN	101150.	**********	815.	835210.	937175.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	33785.	38.	1.27
NITROGEN	617800.	34.	21.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
ELK RIVER	13.030	730.4	0.035	0.843	20.	479.
TAYLOR CREEK	0.300	17.8	0.026	0.935	13.	505.
ROCK CREEK	1.820	106.7	0.320	2.494	9.	646.
LITTLE HURRICANE CHEEK	0.100	5.9	0.025	1.466	14.	797.
TURKEY CREEK	0.160	10.1	0.035	0.774	17.	397.
HURRICANE CREEK	0.170	9.7	0.032	0.729	18.*	840.*
DRY CREEK	1.020	59.6	0.038	2.450	21.	1324.
BOILING FORK CREEK	4.630	271.9	0.040	1.037	11.	545.
WAGNER CREEK	0.750	43.8	0.149	1.859	51.	840.
MESSEY CREEK	0.460	26.9	0.033	2.224	19.	1203.

* ESTIMATED

COMPENDIUM OF NATIONAL EUTHOPHICATION SURVEY LAKES IN TENNESSEE

NAME - WOODS RESERVOIR (EUTROPHIC)
COUNTY - FRANKLIN, COFFEE
STORET NO. - 4728 WORKING PAPER NO. 455, NTIS ACCESSION NO. PB-262 869/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	681.20	16.11	5.7	12.480	85.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
69.	150.	1.8	0.017	0.005	0.320	0.710

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
7.4	0.1	(5/21/73) P	(8/15/73) P	(10/23/73) P

SUMMARY OF PHYTOPLANKTON DATA

5/21/73 GENERA	COUNT	8/15/73 GENERA	COUNT	10/23/73 GENERA	COUNT
ASTERIONELLA	500	STEPHANODISCUS	3434	FLAGELLATES	1160
FLAGELLATES	373	FLAGELLATES	2026	STEPHANODISCUS	102
FRAGILARIA	34	SYNEDRA	1482	SYNEDRA	76
MELOSIRA	20	TETRAEDRON	518	DINOBRYON	38
DINOBRYON	15	BLUE-GREEN FILAMENT	346	MELOSIRA	25
OTHER	20	OTHER	717	OTHER	76
TOTAL	962	TOTAL	8523	TOTAL	1477

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	4965.	**********	5.	11390.	16360.
NITROGEN	14890.	**********	170.	563490.	578550.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	12765.	22.	1.02
NITROGEN	463930.	20.	35.9

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
ELK RIVER	5.430	226.9	0.023	1.328	12.	860.
CHILDER CREEK	0.300	16.7	0.035	1.127	20.	643.
GUM CREEK	0.250	14.1	0.030	1.421	18.	813.
YELLOW BRANCH	0.210	11.4	0.033	1.963	20.	1121.
MEANS CREEK	0.840	46.9	0.015	1.309	18.*	694.*
BRADLEY CREEK	2.350	130.8	0.038	1.755	21.	1006.
ROLLINS CREEK	0.460	17.7	0.042	1.207	18.*	694.*
UNNAMED CREEK	0.080	3.0	0.020	0.773	15.	625.

* ESTIMATED

NAME - LAKE CHESDIN (EUTROPHIC)
COUNTY - AMELIA, CHESTERFIELD, DINWIDDIE
STORET NO. - 5111 WORKING PAPER NO. 458, NTIS ACCESSION NO. PB-252 053/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	3457.60	12.95	7.0	34.100	31.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
34.	85.	0.9	0.044	0.008	0.240	0.675

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
12.6	2.4	(4/ 7/73) P	(7/13/73) P	(9/26/73) P AND N

SUMMARY OF PHYTOPLANKTON DATA

4/ 7/73 GENERA	COUNT	7/13/73 GENERA	COUNT	9/26/73 GENERA	COUNT
FLAGELLATES	291	MELOSIRA	4630	ANABAENA	284
DINOBRYON	230	ANABAENA	694	MELOSIRA	213
STEPHANODISCUS	182	CYCLOTELLA	537	CYCLOTELLA	142
PENNATE DIATOMS	109	FLAGELLATES	442	FLAGELLATES	124
ASTERIONELLA	73	ANKISTRODESMUS	189	PENNATE DIATOMS	71
OTHER	255	OTHER	673	OTHER	197
TOTAL	1140	TOTAL	7165	TOTAL	1031

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	7480.	**********	**********	42905.	50385.
NITROGEN	15015.	**********	65.	604150.	619230.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	47240.	6.	3.89
NITROGEN	888095.	LOSS	47.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
APPOMATTOX RIVER	24.100	2439.8	0.053	0.574	13.	175.
WHIPPONOCK CREEK	0.200	26.4	0.049	0.889	9.	263.
NAMOZINE CREEK	1.500	151.8	0.037	0.540	11.	173.
DEEP CREEK	5.300	530.9	0.031	0.456	10.	147.
WINTERPOCK CREEK	0.500	53.9	0.040	0.640	11.	195.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN VIRGINIA

NAME - CHICKAHOMINY LAKE (EUTROPHIC)
COUNTY - NEW KENT, CHARLES
STORET NO. - 5112 WORKING PAPER NO. 459, NTIS ACCESSION NO. PB-256 548/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	774.40	6.07	4.9	8.100	44.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
16.	75.	1.1	0.066	0.017	0.125	0.715

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME	
13.6	2.1	(4/ 9/73) N	(9/26/73) P AND N

SUMMARY OF PHYTOPLANKTON DATA

4/ 9/73 GENERA	COUNT	9/26/73 GENERA	COUNT
MELOSIRA	853	MELOSIRA	4261
FLAGELLATES	820	MOUGEOTIA	355
PENNATE DIATOMS	292	STEPHANODISCUS	331
DACTYLOCOCCOPSIS	258	ANACYSTIS(MICROCYSTIS)	260
NITZSCHIA	34	CYCLOTELLA	237
OTHER	158	OTHER	1895
TOTAL	2415	TOTAL	7339

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	6825.	**********	20.	12625.	19470.
NITROGEN	17380.	**********	780.	211500.	229660.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	15325.	21.	3.21
NITROGEN	227575.	1.	37.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CHICKAHOMINY RIVER	7.100	697.7	0.078	1.125	15.	268.
TUNYHAM SWAMP	0.100	5.1	0.064	0.660	21.	234.
COLLINS RUN	0.200	17.8	0.076	0.730	25.	262.
BIG SWAMP	0.200	14.7	0.115	0.727	39.	267.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN VIRGINIA

NAME - CLAYTOR LAKE (EUTROPHIC)
COUNTY - PULASKI
STORET NO. - 5103 WORKING PAPER NO. 460. NTIS ACCESSION NO. PB-252 054/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	6138.30	18.19	29.0	97.800	63.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
32.	90.	1.5	0.031	0.008	0.450	0.730

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/ 4/73) P	(7/16/73) P	(9/27/73) P
5.6	1.1			

SUMMARY OF PHYTOPLANKTON DATA

4/ 4/73 GENERA	COUNT	7/16/73 GENERA	COUNT	9/27/73 GENERA	COUNT
FLAGELLATES	490	FLAGELLATES	1947	FLAGELLATES	801
FRAGILARIA	306	NAVICULA	201	APHANIZOMENON	272
SCENEDESMUS	215	NITZSCHIA	113	SYNEDRA	256
SYNEDRA	184	CYMBELLA	88	FRAGILARIA	256
TETRAEDRON	122	DINOBRYON	63	DACTYLOCOCCOPSIS	96
OTHER	488	OTHER	302	OTHER	225
TOTAL	1805	TOTAL	2714	TOTAL	1906

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	34730.	**********	145.	148185.	183060.
NITROGEN	86650.	**********	5390.	2593415.	2685455.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	89960.	51.	10.06
NITROGEN	3905320.	LOSS	147.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
NEW RIVER	83.100	4763.0	0.057	0.862	27.	464.
BIG MACKS RIVER	0.400	48.4	0.022	0.433	6.	119.
BIG REED ISLAND CREEK	8.200	673.4	0.035	0.911	14.	211.
LITTLE REED ISLAND CREEK	2.000	216.3	0.045	0.865	7.	225.
PINE RUN	0.300	38.3	0.022	1.374	6.	355.
PEAK CREEK	2.000	220.4	0.293	2.002	34.	454.
GOOSE CREEK	0.100	9.3	0.065	2.546	15.	547.
UNNAMED STREAM	0.100	9.6	0.154	1.635	35.	348.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN VIRGINIA

NAME - JOHN H KERR RES. (EUTROPHIC)
COUNTY - HALIFAX, MECKLENBURG, VA; GRANVILLE, VANCE, WARREN, NC
STORET NO. - 5106 WORKING PAPER NO. 462, NTIS ACCESSION NO. PB-254 917/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	20150.20	198.25	10.7	197.800	124.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
33.	101.	1.0	0.044	0.009	0.290	0.550

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
8.8	**********	(4/ 7/73) P AND N (7/13/73) P (9/26/73) P AND N

SUMMARY OF PHYTOPLANKTON DATA

3/23/73 GENERA	COUNT	7/13/73 GENERA	COUNT	9/26/73 GENERA	COUNT
MELOSIRA	790	LYNGBYA	931	FLAGELLATES	1523
FLAGELLATES	244	SYNEDRA	667	RAPHIDIOPSIS	1523
DACTYLOCOCCOPSIS	115	FLAGELLATES	479	SYNEDRA	1044
STEPHANODISCUS	72	PENNATE DIATOMS	364	APHANIZOMENON	564
PENNATE DIATOMS	43	CENTRIC DIATOM	223	MELOSIRA	479
OTHER	115	OTHER	1466	OTHER	1891
TOTAL	1379	TOTAL	4130	TOTAL	7024

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	275270.	**********	135.	546445.	821850.
NITROGEN	753310.	**********	5075.	7269635.	8028020.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	152430.	81.	4.15
NITROGEN	6721510.	16.	40.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
ROANOKE RIVER	82.500	8381.2	0.079	1.201	23.	369.
NUTBUSH CREEK	0.100	10.1	0.093	0.884	18.*	293.*
ISLAND CREEK	1.700	176.1	0.051	0.840	15.	268.
GRASSY CREEK	1.700	168.3	0.056	0.899	16.	289.
HYCO RIVER	10.800	1095.6	0.108	1.142	21.	345.
DAN RIVER	68.100	7073.3	0.217	1.360	38.	350.
BANISTER RIVER	14.800	1533.3	0.069	1.240	17.	377.
DIFFICULT CREEK	1.700	178.2	0.030	0.643	9.	202.
LITTLE BLUESTONE CREEK	0.800	84.2	0.056	0.958	16.	305.
BUTCHER CREEK	0.600	58.3	0.087	0.955	18.*	293.*

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN VIRGINIA

NAME - JOHN W FLANNAGAN RES. (MESOTROPHIC)
COUNTY - DICKENSON
STORET NO. - 5105 WORKING PAPER NO. 463. NTIS ACCESSION NO. PB-252 055/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	572.40	4.63	18.0	8.300	118.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
20.	232.	2.1	0.011	0.004	0.320	0.530

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/ 5/73) P	(7/18/73) P	(9/27/73) P
6.0	0.1 - 0.1 (2)			

SUMMARY OF PHYTOPLANKTON DATA

4/ 5/73 GENERA	COUNT	7/18/73 GENERA	COUNT	9/27/73 GENERA	COUNT
FLAGELLATES	348	FLAGELLATES	1287	CYCLOTELLA	1224
DINOBRYON	218	PERIDINIUM	308	FLAGELLATES	577
DINOFLAGELLATES	52	STEPHANODISCUS	218	SYNEDRA	162
SYNEDRA	26	DINOBRYON	109	PERIDINIUM	81
PENNATE DIATOMS	9	TETRAEDRON	54	DINOFLAGELLATES	69
OTHER	0	OTHER	91	OTHER	93
TOTAL	653	TOTAL	2067	TOTAL	2206

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	3075.	**********	**********	8375.	11450.
NITROGEN	8730.	**********	**********	290650.	299380.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	3400.	70.	2.47
NITROGEN	311675.	LOSS	64.7

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
POUND RIVER	3.300	230.3	0.038	1.072	11.	473.
CRANES NEST RIVER	2.500	172.5	0.182	1.216	15.	559.
HOLLEY CREEK	0.100	5.0	1.422	4.562	262.	942.
GEORGES FORK	0.300	20.7	0.023	1.400	9.	582.
BEARPEN BRANCH	0.100	8.8	0.020	0.917	8.	368.
CANE CREEK	0.100	7.2	0.022	0.842	9.	340.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN VIRGINIA

NAME - OCCOQUAN RESERVOIR (EUTROPHIC)
COUNTY - FAIRFAX
STORET NO. - 5108 WORKING PAPER NO. 464. NTIS ACCESSION NO. PB-254 913/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	1533.30	6.88	4.9	14.500	27.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
33.	109.	1.0	0.098	0.037	0.525	1.105

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/10/73) P	(7/19/73) P AND N	(9/29/73) P AND N
12.4	**********			

SUMMARY OF PHYTOPLANKTON DATA

4/10/73 GENERA	COUNT	7/19/73 GENERA	COUNT	9/29/73 GENERA	COUNT
ASTERIONELLA	1529	COELASTRUM	1541	MELOSIRA	3504
FLAGELLATES	257	SCENEDESMUS	522	FLAGELLATES	782
MELOSIRA	122	FLAGELLATES	492	PHACUS	116
SYNEDRA	41	FRAGILARIA	426	COELASTRUM	87
GYMNOSIGMA	14	KIRCHNERIELLA	164	STEPHANODISCUS	58
OTHER	21	OTHER	561	OTHER	202
TOTAL	1984	TOTAL	3706	TOTAL	4749

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	23665.	**********	5.	70040.	93710.
NITROGEN	106990.	**********	190.	646775.	753955.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	36005.	62.	13.62
NITROGEN	696985.	8.	109.6

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
OCCOQUAN RIVER	8.400	888.4	0.046	1.277	10.	385.
HOOES RUN	0.100	11.0	0.044	1.007	11.	269.
BULL RUN	4.600	479.1	0.558	2.455	124.	533.
WOLF RUN	0.100	15.6	0.041	0.924	6.	256.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN VIRGINIA

NAME - RIVANNA RESERVOIR (EUTROPHIC)
COUNTY - ALBEMARLE
STORET NO. - 5113 WORKING PAPER NO. 466. NTIS ACCESSION NO. PB-253 094/AH

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	673.40	1.82	6.1	7.800	16.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
20.	54.	1.0	0.079	0.022	0.475	0.775

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME
6.7	8.9	(4/ 9/73) P AND N (7/19/73) P AND N (9/29/73) P AND N

SUMMARY OF PHYTOPLANKTON DATA

4/ 9/73 GENERA	COUNT	7/19/73 GENERA	COUNT	9/29/73 GENERA	COUNT
FRAGILARIA	1355	MELOSIRA	191	ANABAENA	437
DINOBRYON	376	FLAGELLATES	134	MELOSIRA	368
MELOSIRA	256	SPHAERELLOPSIS	96	CYCLOTELLA	322
CRYPTOMONAS	241	NAVICULA	96	FLAGELLATES	276
NAVICULA	196	ANKISTRODESMUS	38	ANACYSTIS(MICROCYSTIS)	92
OTHER	814	OTHER	76	OTHER	140
TOTAL	3238	TOTAL	631	TOTAL	1635

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	230.	1725.	**********	19570.	21525.
NITROGEN	295.	6535.	**********	255300.	262130.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	13945.	35.	11.83
NITROGEN	276455.	LOSS	144.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
IVY CREEK	0.700	56.7	0.089	1.477	19.	523.
MECHUMS RIVER	3.000	256.7	0.180	1.297	54.	457.
MOORMANS RIVER	2.200	193.0	0.023	0.743	8.	283.
BUCK MOUNTAIN CREEK	1.100	95.8	0.023	0.798	8.	296.
FISHING CREEK	0.100	11.7	0.088	1.235	29.	409.
NAKED CREEK	0.100	8.2	0.040	1.113	13.	362.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN VIRGINIA

NAME - SMITH MOUNTAIN RESERVOIR (MESOTROPHIC--EUTROPHIC)
COUNTY - BEDFORD, FRANKLIN, PITTSYLVANIA
STORET NO. - 5110 WORKING PAPER NO. 465. NTIS ACCESSION NO. PB-253 081/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (YEARS)
IMPOUNDMENT	2652.90	80.94	35.1	28.300	3.2

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
68.	160.	2.0	0.016	0.005	0.410	0.735

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
11.6	0.7 - 9.4 (2)	(4/ 4/73) P	(7/16/73) P	(9/26/73) P

SUMMARY OF PHYTOPLANKTON DATA

4/ 4/73 GENERA	COUNT	7/16/73 GENERA	COUNT	9/26/73 GENERA	COUNT
STEPHANODISCUS	4329	LYNGBYA	7994	FLAGELLATES	1325
FLAGELLATES	2029	CHROOCOCCUS	2858	RAPHIDIOPSIS	564
MELOSIRA	433	RAPHIDIOPSIS	2501	MERISMOPEDIA	536
ANKISTRODESMUS	352	FLAGELLATES	1474	DACTYLOCOCCOPSIS	479
SYNEDRA	189	SYNEDRA	1295	STEPHANODISCUS	423
OTHER	163	OTHER	2679	OTHER	722
TOTAL	7495	TOTAL	18801	TOTAL	4049

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	87105.	5475.	75.	69510.	162165.
NITROGEN	454765.	33215.	2730.	1029335.	1520045.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	9995.	94.	2.00
NITROGEN	661230.	56.	18.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
ROANOKE RIVER	14.000	1326.1	0.276	2.317	25.	418.
BLACKWATER RIVER	4.900	463.1	0.103	0.988	35.	335.
GILLS CREEK	0.900	82.6	0.119	0.799	41.	279.
BACK CREEK	1.600	147.4	0.113	0.733	7.	219.
FALLING CREEK	0.300	28.5	0.075	0.893	25.	325.
BEAVERDAM CREEK	0.800	69.9	0.099	0.990	33.	351.
KATES CREEK	0.100	11.9	0.036	0.710	13.	263.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WEST VIRGINA

NAME - BLUESTONE RESERVOIR (EUTROPHIC)
COUNTY - GILES, VA; MERCER, MONROE, SUMMERS, WV
STORET NO. - 5401 WORKING PAPER NO. 467, NTIS ACCESSION NO. PB-252 056/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	11924.40	8.25	5.8	167.200	3.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
55.	171.	0.7	0.074	0.018	1.080	1.380

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/ 3/73) P	(7/18/73) P	(9/26/73) P
14.9	4.3			

SUMMARY OF PHYTOPLANKTON DATA

4/ 3/73 GENERA	COUNT	7/18/73 GENERA	COUNT	9/26/73 GENERA	COUNT
NAVICULA	74	FRAGILARIA	409	APHANIZOMENON	1851
SYNEDRA	63	FLAGELLATES	170	STEPHANODISCUS	1562
CYMBELLA	35	STEPHANODISCUS	68	FLAGELLATES	1157
FLAGELLATES	26	OSCILLATORIA	68	CYCLOTELLA	636
GUMPHONEMA	24	COELASTRUM	34	SCENEDESMUS	609
OTHER	128	OTHER	103	OTHER	1503
TOTAL	350	TOTAL	852	TOTAL	7318

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	105310.	2825.	20.	156230.	264385.
NITROGEN	301870.	2616300.	690.	4777985.	7696845.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	237910.	10.	32.05
NITROGEN	7503630.	3.	933.0

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
NEW RIVER	132.100	9039.1	0.043	1.630	13.	437.
LITTLE BLUESTONE RIVER	1.400	89.9	0.012	0.433	6.	214.
BLUESTONE RIVER	12.600	940.2	0.149	0.847	17.	247.
PIPESTEM CREEK	0.800	51.8	0.017	0.525	8.	268.
LICK CREEK	0.900	55.4	0.019	0.589	10.	300.
ISLAND CREEK	0.600	36.0	0.015	0.810	7.	399.
EAST RIVER	1.500	197.1	0.022	0.819	6.	191.
WOLF CREEK	8.100	577.6	0.027	0.883	12.	392.
RICH CREEK	1.100	131.1	0.166	0.995	37.	240.
INDIAN CREEK	3.600	479.1	0.031	1.185	6.	275.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WEST VIRGINA

NAME - LAKE LYNN (HAD CODE FOR TROPHIC STATE
COUNTY - MONONGALIA
STORET NO. - 5402 WORKING PAPER NO. 469. NTIS ACCESSION NO. PB-251 119/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	3654.50	7.00	12.8	88.400	12.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
10.	117.	2.5	0.006	0.003	0.490	0.710

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
		(4/24/73) P	(7/28/73) P	(10/ 5/73) P
4.7	0.1			

SUMMARY OF PHYTOPLANKTON DATA

4/24/73 GENERA	COUNT	7/28/73 GENERA	COUNT	10/ 5/73 GENERA	COUNT
FLAGELLATES	21	GLENODINIUM	657	KIRCHNERIELLA	441
PINNULARIA	10			GLENODINIUM	286
CLOSTERIUM	10			FLAGELLATES	66
EUGLENA	10			NAVICULA	11
				XANTHIDIUM	11
OTHER	1	OTHER	0	OTHER	0
TOTAL	52	TOTAL	657	TOTAL	815

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	85.	**********	35.	60455.	60575.
NITROGEN	395.	**********	1375.	2159975.	2161745.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	24250.	60.	8.65
NITROGEN	2061655.	5.	308.8

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
CHEAT RIVER	85.900	3548.3	0.021	0.755	16.	581.
HUBLES RUN	0.700	32.1	0.015	1.266	11.	908.
COLES RUN	0.100	4.2	0.012	1.186	10.	919.
WHITES RUN	0.200	7.8	0.138	1.296	103.	990.
UNNAMED STREAM (E1)	0.100	4.0	0.654	0.785	465.	552.

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WEST VIRGINA

NAME - SUMMERSVILLE RESERVOIR (MESOTROPHIC)
COUNTY - NICHOLAS
STORET NO. - 5403 WORKING PAPER NO. 469. NTIS ACCESSION NO. PB-251 783/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	2082.40	11.02	21.0	53.100	50.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
10.	50.	3.5	0.011	0.006	0.660	0.940

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
6.2	0.1	(4/ 3/73) P	(7/18/73) P	(9/28/73) P

SUMMARY OF PHYTOPLANKTON DATA

4/ 3/73 GENERA	COUNT	7/18/73 GENERA	COUNT	9/28/73 GENERA	COUNT
NAVICULA	60	FLAGELLATES	317	CENTRIC DIATOM	579
TETRAEDRON	20	MELOSIRA	284	DINOBRYON	482
FLAGELLATES	20	SYNEDRA	67	CYCLOTELLA	241
		CYCLOTELLA	50	MELOSIRA	205
		SPHAEROCYSTIS	17	FLAGELLATES	133
OTHER	0	OTHER	0	OTHER	73
TOTAL	100	TOTAL	735	TOTAL	1713

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	4440.	**********	**********	26585.	31025.
NITROGEN	14410.	**********	**********	1379480.	1393890.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	27975.	10.	2.82
NITROGEN	1414220.	LOSS	126.5

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
GAULEY RIVER	34.400	1367.5	0.016	0.803	12.	635.
HOMINY CREEK	6.400	269.4	0.017	0.873	13.	682.
PANTHER CREEK	1.200	43.8	0.010	1.663	8.	1425.
BIG BEAVER CREEK	2.800	102.6	0.024	0.746	20.	646.
MUDDLETY CREEK	4.600	173.8	0.020	0.627	16.	531.
ARBUCKLE BROOK	0.200	7.1	2.957	6.367	14.*	821.*

* ESTIMATED

COMPENDIUM OF NATIONAL EUTROPHICATION SURVEY LAKES IN WEST VIRGINA

NAME - TYGART RESERVOIR (MESOTHROPHIC)
COUNTY - BARBOUR, TAYLOR
STORET NO. - 5404 WORKING PAPER NO. 470. NTIS ACCESSION NO. PB-251 118/AB

I. MORPHOMETRY

LAKE TYPE	DRAINAGE AREA (SQ KM)	SURFACE AREA (SQ KM)	MEAN DEPTH (METERS)	TOTAL INFLOW (CMS)	RETENTION TIME (DAYS)
IMPOUNDMENT	3537.90	7.08	17.4	73.200	20.0

II. PHYSICAL AND CHEMICAL CHARACTERISTICS

MEDIAN ALKALINITY(MG/L)	MEDIAN CONDUCTIVITY(UMHOS)	MEAN SECCHI DISC (METERS)	MEDIAN TOTAL P(MG/L)	MEDIAN ORTHO P(MG/L)	MEDIAN INORG N(MG/L)	MEDIAN TOTAL N(MG/L)
10.	82.	3.1	0.006	0.005	0.430	0.640

III. BIOLOGICAL CHARACTERISTICS (LAKE)

MEAN CHLOROPHYLL A (UG/L)	ALGAL ASSAY CONTROL YIELD (MG/L--DRY WT)	LIMITING NUTRIENT AT SAMPLING TIME		
1.2	0.1	(4/23/73) P	(7/28/73) P	(10/ 5/73) P

SUMMARY OF PHYTOPLANKTON DATA

4/23/73 GENERA	COUNT	7/28/73 GENERA	COUNT	10/ 5/73 GENERA	COUNT
FLAGELLATES	104	GLENODINIUM	69	ANACYSTIS(MICROCYSTIS)	287
DINOHRYON	57	CENTRIC DIATOM	69	SCENEDESMUS	202
PENNATE DIATOMS	17	ANKISTRODESMUS	35	PHORMIDIUM	169
NITZSCHIA	13	FLAGELLATES	35	FLAGELLATES	118
NAVICULA	10			NITZSCHIA	67
OTHER	11	OTHER	0	OTHER	135
TOTAL	212	TOTAL	208	TOTAL	978

IV. NUTRIENT LOADING CHARACTERISTICS(LAKE)

A. INPUT

	POINT SOURCE MUNICIPAL (KG/YR)	POINT SOURCE INDUSTRIAL (KG/YR)	POINT SOURCE SEPTIC TANKS (KG/YR)	NON-POINT SOURCE (KG/YR)	TOTAL LOADING (KG/YR)
PHOSPHORUS	5330.	**********	15.	42750.	48095.
NITROGEN	15985.	**********	650.	1401020.	1417655.

B. OUTPUT

	OUTLET(S) (KG/YR)	PERCENT RETENTION	LAKE SURFACE AREA LOADING RATE (G/SQ M/YR)
PHOSPHORUS	43935.	9.	6.79
NITROGEN	1507515.	LOSS	200.2

V. NON-POINT-SOURCE NUTRIENT EXPORT

STREAM NAME	MEAN FLOW (CMS)	DRAINAGE AREA (SQ KM)	MEAN TOTAL P (MG/L)	MEAN TOTAL N (MG/L)	TOTAL P EXPORT (KG/SQ KM/YR)	TOTAL N EXPORT (KG/SQ KM/YR)
TYGART VALLEY RIVER	50.100	2447.5	0.020	0.574	11.	367.
SCAB RUN	0.100	4.3	0.159	2.499	115.	843.
FROG RUN	0.100	3.4	0.056	1.003	41.	769.
SWAMP RUN	0.200	9.7	0.077	1.241	30.	658.
SANDY CREEK	4.500	207.2	0.010	0.508	7.	354.
TETER CREEK	3.100	138.6	0.015	0.568	10.	404.
LAUREL CREEK	3.100	140.1	0.011	0.527	8.	372.
PLEASANT CREEK	0.700	32.6	0.027	0.774	19.	554.